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ABSTRACT

The purpose of the California State Library-sponsored project, InFoPeople, is to enhance access to information resources by providing points of public access to the Internet in public libraries throughout the state of California. This Stage 1 report represents an initial set of findings and issues related to the InFoPeople project and provides the current status of the evaluation project to date. Specifically, the report presents findings regarding: the reformatting of the quarterly and user surveys, including the development of scripts to migrate data from these surveys into analytical tools such as Excel; an analysis of data contained in these two surveys with a discussion of issues affecting how such data might be better collected, managed, and analyzed in the future; and results of surveys administered to InFoPeople site contacts and community partners. Thirty-four figures and tables present data. Appendices include copies of programming scripts, an outline of changes to the quarterly statistics database, and the library liaison and community partners survey questionnaires. (AEF)

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INFOPEOPLE SURVEYS AND QUARTERLY STATISTICS: PRELIMINARY FINDINGS

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INTRODUCTION

In August 1998 the investigators initiated a study that had the broad purpose of assessing the California State Library (CSL) - sponsored project, InFoPeople. The InFoPeople project is an effort sponsored by the CSL and funded by LSCA, LSTA, and local library funds. The purpose of InFoPeople is to enhance access to information resources by providing points of public access to the Internet in public libraries throughout the state of California.

The evaluation effort serves as an initial assessment of the InFoPeople initiative that will provide the CSL with baseline data on the value, use, and impact of the project on various California user communities throughout the state, and in the development of new project directions. In particular, the evaluation project as originally conceived, had the following goals:

I. Compile and evaluate statistical information collected by the InFoPeople project:

- Collate, organize, analyze, and report existing statistical data that has been collected describing various InFoPeople services, programs, and activities.
- Make recommendations as to how the current and future data collection activities and tools can be improved and integrated into ongoing InFoPeople and CSL statistics.
- Develop measurement devices that the California State Library can use in the future to maintain ongoing or periodic assessment of the InFoPeople project.

II. Compile and evaluate information about InFoPeople users and the InFoPeople project:

- Identify primary and secondary user groups of the InFoPeople project.
- Measure the nature and extent of use of the InFoPeople project for the primary and secondary user groups.
- Evaluate the effectiveness of the training programs.
- Evaluate the effectiveness of the Community Plan component.
- Evaluate the effectiveness of the Community Partner component.

III. Make recommendations regarding future project activities:

- Recommend refinements and modifications to the InFoPeople project to more closely meet the needs of its users;
- Identify targeted populations for specialized projects or new program directions. (e.g., geographic, non-public library, ethnic/cultural); and

- Identify criteria whereby the InFoPeople program can be considered completed, at the individual library and on a statewide basis.

The evaluation effort was organized into two stages. This report summarizes efforts to date regarding Stage 1. Originally, Stage 1 had the following activities:

(1) Analyze existing statistics and data

- Identify the various data sets that have been and are being collected and maintained that describe activities, programs, and services related to the InFoPeople project.

- Develop a database that integrates these data into a coherent and organized means for access and analysis.

- Provide an electronic copy of that database to the California State Library, using one or more applications from the Microsoft Office '97.

- Produce a report that describes and analyzes the data, provides an overview of the statistics and what they mean, and makes recommendations for the future development and maintenance of the database.

(2) Deliver statistical and other measurement tools to the California State Library to implement at a later date for continued evaluation of the InFoPeople project and its impact on services provided by libraries in California:

- Initially develop, modify, and finalize measurement tools in conjunction with Library Development Services and InFoPeople staff. These tools will survey primary InFoPeople clients (e.g., library staff, community partners) and secondary InFoPeople clients (e.g., library patrons who use InFoPeople workstations).

All activities identified in (1) above have been completed and are discussed in this report. Work has been developed and will continue in Stage II to develop measurement tools as described in (2) above. For example, measurement tools such as the quarterly survey and user survey databases, the survey administered to InFoPeople site contacts, and the data base resulting from that survey are products and tools delivered in Stage 1 that meet activities suggestion in (2) above.

When planning the project, all participants understood that it would be difficult to predict the specific level of effort that would be needed to analyze the database containing the user and quarterly surveys, write the pearl scripts to export that data for analysis in tools such as Excel, and conduct an analysis of data from those surveys. Unfortunately, due to a host of technical issues, a significantly greater level of effort to complete this part of Stage I was needed than originally anticipated by the investigators

It is also important to note that a major change to Stage I activities included the administration and analysis of a survey to all InFoPeople site contact. Originally intended as part

of Stage II, this survey was administered in Stage I to inform the site visits and other data collection efforts so that these visits would be more useful in addressing the evaluation goals outlined above. Further, there was a sense that data from these surveys would be useful to InFoPeople administrators in short-term project development – especially in the area of training and Cycle 4 developments. Indeed, as shown later in this report, there are very interesting preliminary findings from this survey.

This Stage I report represents an initial set of findings and issues related to the InFoPeople project. More specifically, the report presents findings regarding:

- The reformatting of the quarterly and user surveys including the development of scripts to migrate data from these surveys into analytical tools such as Excel.
- An analysis of data contained in these two surveys with a discussion of issues affecting how such data might be better collected, managed, and analyzed in the future.
- A survey administered to all InFoPeople site contact during September 1998.

The various data contained in the InFoPeople user surveys and quarterly reports can now be scripted to be accessed through Excel (or other tools) to better analyze data being collected via these instruments. Copies of these scripts are included in the report and will be provided to project liaisons in electronic format. Data from these two surveys can be analyzed longitudinally to produce a number of interesting findings and trends related to the use, impact, and issues regarding the InFoPeople project. Examples of this type of analysis are provided in the second section of this report.[1]

Results from a survey distributed to all InFoPeople site contacts during September 1998 suggest that there are a number of key issues that affect the overall success and future direction of the project. For example, there is preliminary evidence that InFoPeople contacts believe there has been significant impact from the project in terms of improved community access to the Internet. In addition, there appears to be some evidence that where the InFoPeople project site had a high level of involvement from the community liaison there was greater project impact. Site contacts also report difficulties in providing high quality training to users; in having adequate technical support to maintain the workstations; and in leveraging access to the Internet through collaborations with the local community partners. These and other findings are discussed in greater detail in the final section of the report.

This Stage I report provides the current status of the evaluation project to date. The investigators intend to continue analysis of the findings reported here as a basis for developing data collection instruments for use in the site visits to selected InFoPeople sites during February 1999. We will also be comparing findings from the various surveys and data collection efforts once they have all been completed. Thus, this Stage I report is not intended to provide overall

[1] The initial quarterly statistics PERL scripts developed by the study team were modified by the InFoPeople project staff due to changes in the quarterly statistics data collection form instituted in October 1997. The reworked PERL scripts were used for the analysis presented in this report.

conclusions, recommendations, or future directions for the InFoPeople project. Such content will be included in the final report, scheduled for completion in April 1999.

INFOPEOPLE PROJECT DATA COLLECTION EFFORTS

REFORMATTING THE QUARTERLY REPORT AND USER SURVEY DATA

Introduction

Over the past two years – the technology which aides in the management of Web sites is changing very rapidly, making it difficult for Web site administrators to stay abreast with these changes. At one point having a form which users completed on a Web site seemed to be cutting edge technology. Today there is an ever growing need to collect, analyze, store, and manage information that users provide to a Web site. Decisions need to be made as to the method for collecting users' information, how this information is analyzed, where, and for how long is the information going to be stored, who will have access to this information, and who or what is going to manage this entire process.

InFoPeople User Survey and Quarterly Statistics Background

There are two on-line forms on which InFoPeople collects information dating back to 1996. The first form can be found at http://InFoPeople.berkeley.edu:8000/ipqtrrpt.html, and is completed by site contacts every quarter. The second form can be found at http://InFoPeople.berkeley.edu:8000/ipeval.html, and is completed by an estimated 100 users a month. Both forms are parsed via PERL scripts that are running on a Digital UNIX server in California. A person who has since left the project wrote the PERL scripts quite some time ago. Initial discussions with Carole Leita (Web site manager/Project Librarian) in September and October 1998, identified specific issues that InFoPeople wished to address in the updated PERL scripts:

1. Eliminate all the blank entries – e.g. when user clicks before they fill anything out – would need to judge "blank" on whether the data fields are empty?

2. Eliminate duplicates – (this is a relatively common occurrence) – the person will immediately see they made a mistake and change one thing and re-send. Would it be possible to eliminate duplicates based on library jurisdiction and branch fields? And leave the latest submitted?

3. Have the results sent to different files in /home/ipeval/qreport depending on the quarter, e.g. Jan-May98 Reports for those that check that quarter, etc. Could this be a routine that would create the file the first time it was written to and give it write permission for all? If not, we could create a file for each quarter as long as it could be written to.

4. Round the numbers in the data fields – eliminate fractions.

5. Total the data in the "just the data" section columns.

6. Have the entries sorted in alpha order rather than chronological as it is now. Sort on first the Library Jurisdiction, then Branch and don't print the period covered.

7. Add the Library Jurisdiction/Branch to the Name and e-mail of reporter section and to the Comments section.

8. Put the Legend into more compact form (2 or 3 lines) rather than with each on a line as is now and repeat it on every (printed) page.

To handle the amount of data being processed over time, the issue of implementing a relational database (MS-SQL, Access) arose. However there are several problems that steered us away from this:

1. Implementing a relational database on their systems would require linking the UNIX server to an NT Server. Although this is possible, it will be tough to do from a distance, and would require excessive work.

2. Using a relational database may require InFoPeople hiring a part-time database manager, which can be expensive – and not cost effective.

3. The amount of data that InFoPeople currently collects does not require a large-scale database.

4. The types of statistics generated are fairly straightforward, and would not require a relational database.

The study team then discussed re-writing the existing PERL scripts. After taking a look at them the study team realized that it would be spending too much time trying understand their original development.

The study team determined that the most effective approach would to rewrite the PERL scripts to include all the functionality listed above and to optimize them for the type of data to be processed. The new PERL scripts will query a data file produced from the on-line forms and then create reports based on a more straightforward reporting approach.

Since the preliminary discussions with InFoPeople project staff, however, two factors influenced the final development of the study team-developed PERL scripts as outlined below:

1. Initial discussions with InFoPeople project staff did not reveal that a change in the quarterly statistics reporting form occurred beginning with the October-December 1997 reporting period. Thus, the study-team developed PERL script did not correctly parse the raw data from October 1997 through June 1998.

2. InFoPeople was able to hire a programmer in November 1998. The programmer, Bill Moseley, developed a new script file that correctly parsed the October 1997 through June 1998 data.

Below is a discussion of the PERL script methodology that the study team undertook.

Methodology

The methodology used to re-write the existing PERL scripts involved several key components. Each of those components is identified and discussed below.

Quick Analysis

Before the study team could begin to re-write the existing PERL scripts that collect data from users of the InFoPeople Web site, we needed to write a PERL script that parsed through the existing data (in some cases dating back to 1996) on the InFoPeople Web site. Our first step in this project was to collect all the raw data, which in some cases dated back to 1996. The raw data was found at: http://InFoPeople.berkeley.edu:8000/stats/.

Once we combined all the raw data from each report into one file, we then wrote two PERL scripts (one for each set of raw data), which parsed through the raw data and created "|" delimited files, which could be imported into Microsoft Excel or other statistical analysis programs.

Some problems encountered in the quarterly report were data that were collected in 1996 and parts of 1997 that included an extra field called "Hours Accessed, and the "Hours Open" field which changed to "Hours Offered" in 1997. Based on these findings the PERL scripts were re-written to include all possible variables, and for the instances were "Hours Accessed" was not collected, the field was left blank.

To make analysis easier on the user survey report, we combined several variables that originally were in separate fields. The problem here came from the use of check boxes on the User survey form (http://InFoPeople.berkeley.edu:8000/ipeval.html). While check boxes are an easy way for a user to select more then one option, they inherently put the output within several fields, making it more difficult to parse. The PERL script that we wrote combines the fields, thus making it easier to build a comprehensive report.

Rewrite of the PERL Scripts

The second project that we completed was to change the way the reports and surveys are processed by rewriting the PERL scripts that process both the quarterly and the public access forms. We did not change the front end of the forms, meaning that users will still fill out the appropriate form at the InFoPeople Web site.

Quarterly Survey

One request that was made by InFoPeople was to not allow duplicate entries, and to eliminate blank entries. To solve this problem the new scripts require that the Library Jurisdiction, Branch Name, and Contact Name be filled out. If one or both of these fields are empty the user will receive an error message (which can be customized by InFoPeople) instructing them to go back and enter the appropriate information. When the public access form is appropriately filled out

and submitted, fileit-ipeval.cgi (located in the same directory) is executed (*see Appendix A for a copy of this PERL script).*

Rather then use a flat file database, which can become large, and difficult to parse, the PERL script ties a local associative array (hash) to a Unix database file called 'QREP.db'. This file is not a flat file, but an actual database file. The database file is setup in the following key:value scheme:

key = LibraryJurisdiction:BranchName
value = All the rest of the fields, colon delimited...
ContactName:EmailAddress:Staff_Hours:GeneralComments:etc

The reason the study team used this key:value scheme is so entries could be cataloged and alphabetized by the Library Jurisdiction and the Branch Name. This also creates actual records in a database for each entry, as opposed to an inconsistent number of lines per record in a flat file. Each record is created with the same number of fields, regardless of whether or not information was entered. Empty fields are inserted and left blank, meaning that alignment with the rest of the records will not be thrown off.

An advantage of using a database file like this is to prevent information duplication and only have the most recent and relevant information recorded. Keys in the database are represented by a string of text that must be unique from any other key in the database. The key of every record consists of just the Library Jurisdiction and the Branch Name. If a user tries to fill out the form a second time (assuming it is within the same reporting period, and they have spelled the Jurisdiction and Branch Name correctly), it will overwrite the entry in the database and the new information will be stored.

Once the information is in the database, an administrator can run a PERL script that we created called, 'convert.cgi'. When 'convert.cgi' is executed (*see Appendix B for a copy of this PERL script)*, it asks for a name for the output file. This gives the administrator the freedom to name and categorize the log files however they want. The convert.cgi PERL script will output a flat file (similar to the old multi-line version) from the database. The reason it does not go straight to a flat file is for performance and reliability.

The final step is to run another PERL script we created called 'process2.cgi.' (*see Appendix C for a copy of this PERL script)* When an administrator runs process2.cgi it will ask for the file that they want to process – which is the filename that they created from the above PERL script (convert.cgi). Process2.cgi creates a flat file, with one record per line, pipe (|) delimited. This final file has a suffix with a '.processed' extension, which can now be imported into Excel or any other statistical analysis program.

User Survey

Based on discussions with InFoPeople, the experience of the study team, and suggestions from the quarterly survey, we made the following changes:

1. Eliminated all the blank entries.

2. Eliminated duplicates – This was done using the same method found in the quarterly survey.

3. Sent results to different files in /home/ipeval/ureport depending on the quarter.

4. Sort entries in alpha order rather than chronological as it is now. The sort is based first on the Library Branch.

To help eliminate blank entries the new scripts require participants to complete the City, County, and Branch fields. If one or both of these fields are empty the user will receive an error message (which can be customized by InFoPeople) instructing them to go back and enter the appropriate information. When the survey form is appropriately completed and submitted, clmailit.cgi (located in the same directory) is executed (*see Appendix D for a copy of this PERL script)*. Clmailit.cgi formats the information in the form and adds it into a Unix DB file which is called 'IPEVAL.db'. Below is an example which shows the format of a database entry:

keys = Library_City:Library_County:Library_Branch
value = All the rest of the fields, colon delimited...
Name:City:Further_Comments:etc:

Once the information is in the database, an administrator can run a PERL script that the study team created called, 'convert.cgi'. When 'convert.cgi' is executed (*see Appendix E for a copy of this PERL script)*, it asks for a name for the output file. This gives the administrator the freedom to name and categorize the log files however they want. The convert.cgi PERL script will output a flat file (similar to the old multi-line version) from the database.

The final step is to run another PERL script we created called 'process.cgi.' (*See Appendix F for a copy of this PERL script)* When an administrator runs process2.cgi it will ask for the file that they want to process – which is the filename that they created from the above PERL script (convert.cgi). Process.cgi creates a flat file, with one record per line, pipe (|) delimited. This final file has a suffix with a '.processed' extension, which can now be imported into Excel or any other statistical analysis program.

Administration of Database Files

A new addition to both surveys is a PERL script called, 'adminDB.*cgi' (see Appendix G for a copy of this PERL script*). A copy of this PERL script is located in both the user and quarterly directories. Once an administrator runs this script they will be presented with a few options.

1. Clear the Database and erase all the information in it.

2. You can print out all the entries to the screen.

3. Finally, you can populate the database with just numbers (this is what is used to initialize the database and probably won't have much use).

There is NO safety on 'adminDB.cgi', nor is there any confirmation of actions. If you choose to clear the database, there is no recovery and all data will be lost. 'adminDB.cgi' is a tool that the study team created to help build these databases, and does not have to be used by InFoPeople.

Issues for discussion

The method in which the user survey and quarterly survey process and store information has changed considerably to reflect the needs of InFoPeople. Amid these changes, however, there are several key issues that InFoPeople will need to consider:

1. **Future changes**. Anytime an element (variable) is changed within either form, the associated PERL scripts will need to be updated to reflect that change.

2. **Administrator**. There needs to be someone at InFoPeople who is responsible for running the PERL scripts once a quarter. This person should also be familiar with some PERL scripting in the event that changes or updates need to be made

3. **Report generation**. The PERL scripts will only provide InFoPeople with a pipe (|) delimited text file, meaning that someone will need to import that text file into a statistical analysis program to generate reports.

4. **Dissemination**. InFoPeople needs to establish the best way to present a summary of the statistics to their user base. Possibilities include a printed mailing, an email response, and/or posting the findings on the InFoPeople Web site.

5. **Coverage**. This study only examined two sets of data, while there are clearly other data sets that InFoPeople collects. InFoPeople may want to investigate how to cross analyze their remaining data sets with the one's examined in this study.

InFoPeople administrators will need to keep these issues, and others that will develop as a result of additional changes in the future, in mind as they continue to collect quarterly and user statistics.

Summary

This effort is a first step at redesigning the process in which InFoPeople collects, analyzes, stores, and manages information that users provide to their Web site. These PERL scripts provide the necessary means by which these two important data collection instruments can be analyzed longitudinally. An important factor to remember is that these PERL scripts are simply tools, and that staff involvement and management will always be necessary to obtain useful and timely data.

The study team will provide the Peninsula Library System with electronic copies of the PERL scripts, surveys, and survey databases in Microsoft Office '97 Products.

QUARTERLY REPORT SURVEY DATA ANALYSIS AND FINDINGS

InFoPeople site participants have had to submit a quarterly report that provides descriptive data about the site, volunteers, and workstation usage (see http://infopeople.berkeley.edu:8000/ipqtrrpt.html for a copy of the survey) since the inception of the InFoPeople program in 1996. Raw data were only available for analysis purposes, however, for the quarter beginning in January 1997 through the quarter ending in June 1998.

Issues with the Quarterly Data and Data Set

As discussed in the *Reformatting the Quarterly Report and User Survey Data* section of this report, InFoPeople project staff developed a new PERL script file to extract the quarterly statistics data for analysis purposes. Even with this reworking of the PERL script, however, there remain issues with the data set that affect the analysis process and presentation of the quarterly statistics data. These issues include:

- Erroneous data entry on the part of the site contact or other person responsible for completing the on-line form on behalf of the participating site. Examples include inserting one quarter's data in another quarter's form. For the quarters of analysis presented in this report, there was no mechanism in place on the on-line form that prevented users from entering Jan-March 1998 data using the Oct-Dec 1997 form.

- Inconsistent data entry. Some site contacts entered a per-workstation number of hours for the Hours_Access/Hours_Offered data variables. Thus, if a site had 3 workstations, some site contacts multiplied the number of hours the site was open by the number of workstations. Others did not. One would have to create an InFoPeople_workstations variable to track this data and ensure the consistency of all site data.

- Changes in the data collected. For the quarters beginning in January 1997 and ending in September 1997, Hours_Access data (the number of hours per week that the public access workstations were available to the public) was collected. Beginning with the October 1997 quarter, this was changed to Hours_Offered and was measured for the entire quarter -- not by week. To compensate for the difference in data collected, a new variable was created for the analysis in this report. This variable, **Access&Offered**, transforms the Hours_Access data by multiplying by a factor of 13 (the number of weeks per quarter), while maintaining the same data for the Hours_Offered variable. For consistency, only the Access&Offered data are analyzed in this report.

Based on some of the issues identified here, the data set supplied to the study team by the InFoPeople project team required some modification. In particular, the study team corrected, where possible and identifiable:

- Incorrectly labeled quarter dates;

- Incorrectly placed Hours_Access data; and

- Incorrectly entered Hours_Open data

Appendix H presents the specific changes to the data set.

Hours of Access

The average hours of public Internet access per quarter to the InFoPeople workstations remains relatively constant across the quarters (see Figure 1). There is an overall decrease in the average hours of access from January-March 1997 with 548.2 hours to 484.4 hours in April-June 1998. The decrease, however, is not statistically significant, and may be due to such factors as identified in the *Issues with the Quarterly Data and Data Set section above.*

There appear to be two distinct linear trends when reviewing the average number of hours the workstations were connected to the Internet per quarter data. Between January-March 1997 and July-September 1997 quarters, the average number of connected hours rose from 367.7 to 442.2 hours (see Figure 2). Beginning with the October-December 1997 quarter (the quarter in which the initial quarterly report form underwent changes), the average number of connected hours dropped to 331.3 hours and rose to 368.5 hours in the April-June 1998 quarter (see Figure 2). While it is not possible to discern, the beginning of a new upward trend of connected hours may be due to the changes in the reporting form that began with the October-December 1997 quarter.

Figure 1. Average Hours of Access Offered by Participating Libraries by Quarter.

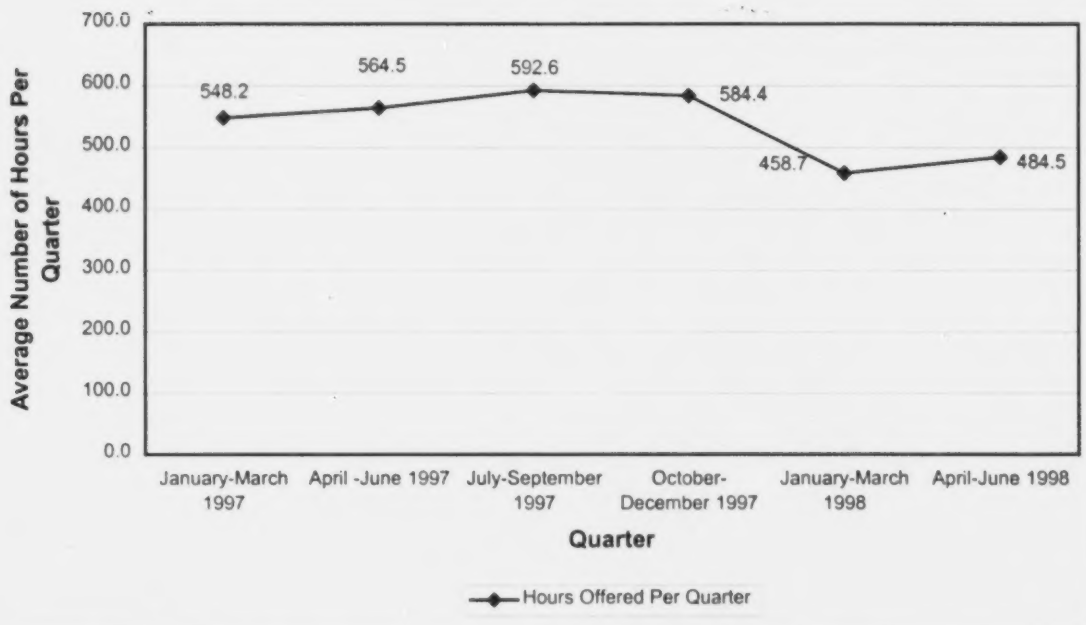


Figure 2. Average Number of Hours the InFoPeople Workstations Are Connected to the Internet by Quarter.

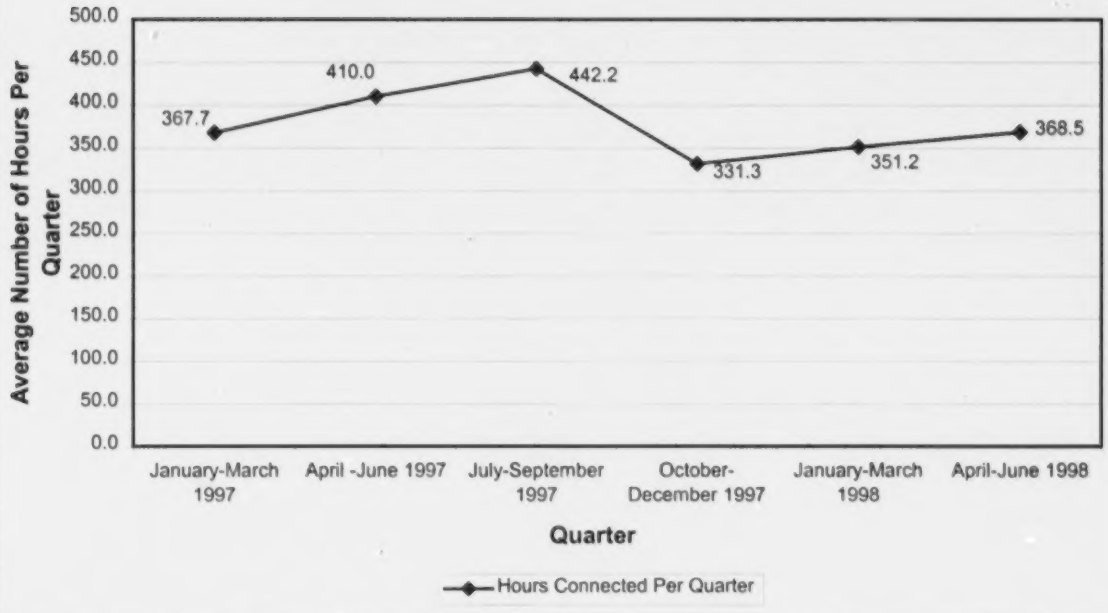
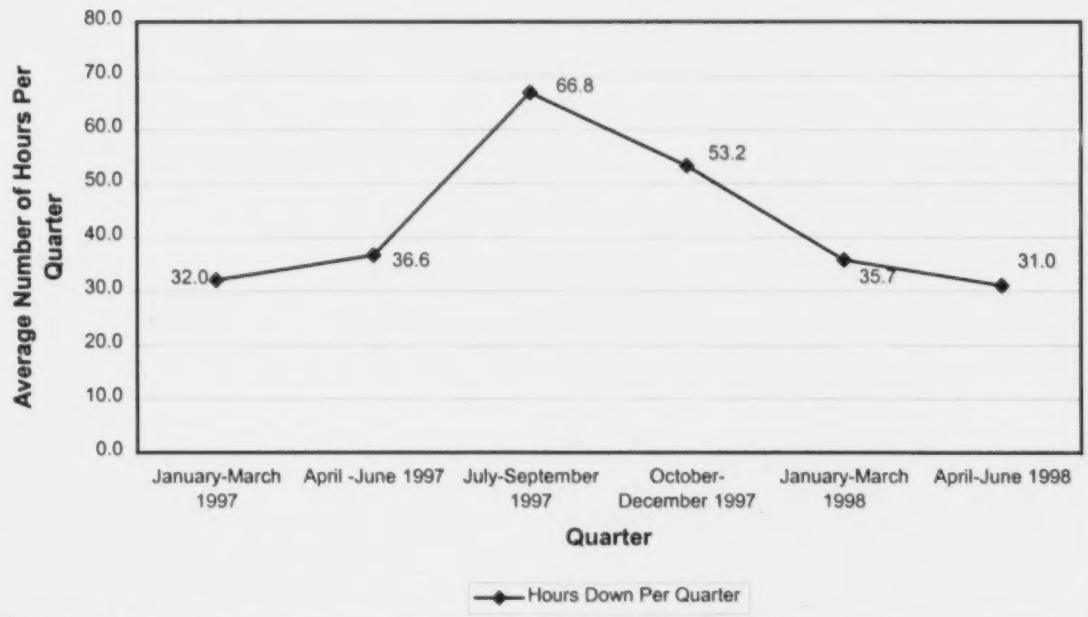


Figure 3. Average Number of Hours that the InFoPeople Workstations Were Down Per Quarter.



As Figure 3 shows, the average number of hours that the InFoPeople workstations were down/non-operational, with the exception of the July-September 1997 and October-December 1997 quarters, remained essentially constant, with the average number of down hours in the low- to mid-30s. During the January-March 1997 quarter, the average number of down hours was 32.0 and during the April-June 1998 quarter, the average number of down hours was 31.0 (see Figure 3). Based on a review of the raw data, there appear to be some significant down hour entries in a small number of sites during the July-September 1997 and October-December 1997 quarters that are causing the average down times in those quarters to rise.

Users and Volunteers

The average number of users accessing the Internet through the InFoPeople workstations data also has two distinct linear trends, one for the January-March 1997 through July-September 1997 quarters and another for the October-December 1997 through April-June 1998 quarters (see Figure 4). Between January-March 1997 and July-September 1997, the average number of uses increased from 453.3 to 525.3. Beginning with the October-December 1997 quarter, the average number of users decreased to 364.3 and rose to 453.3 by the April-June 1998 quarter (see Figure 4). Again, this may be due to the change in the reporting form beginning with the October-December 1997 quarter.

The average number of volunteers participating in the InFoPeople project has remained relatively constant throughout the project (see Figure 5). In the January-March 1997 quarter, participants reported an average of 3.0 volunteers. For the April-June 1998 quarter, the average number was 2.7 (see Figure 5). The lowest average number of volunteers occurred during the October-December 1997 quarter, with 2.0. The average number of hours that volunteers contribute has declined somewhat over time (see Figure 6). Volunteers contributed an average of 39.7 hours in January-March 1997 and 29.1 hours in April-June 1998 (see Figure 6).

Training

The average number of users trained to use the InFoPeople workstations has declined remained relatively constant -- albeit a slight decline -- over time. The average number of users trained during the January-March 1997 quarter was 34.8, whereas it was 27.9 during the April-June quarter (see Figure 7).

The average number of staff trained per quarter data demonstrates two distinct trends (see Figure 8). During the January-March 1997 through July-September 1997 quarters, the average number of staff trained was between 4.5 and 4.7 staff (see Figure 8). Beginning with the October-December 1997 quarter, however, there is a jump to an average of 7.2 staff trained followed by a linear decrease to 4.7 staff trained during the April-June 1998 quarter (see Figure 8). The average number of hours of staff training shows a similar trend (see Figure 9). Again, this may be due to changes in the reporting form that began with the October-December 1997 quarter or other project-related factors such as training workshops.

Figure 4. Average Number of People Using the InFoPeople Workstations Per Quarter.

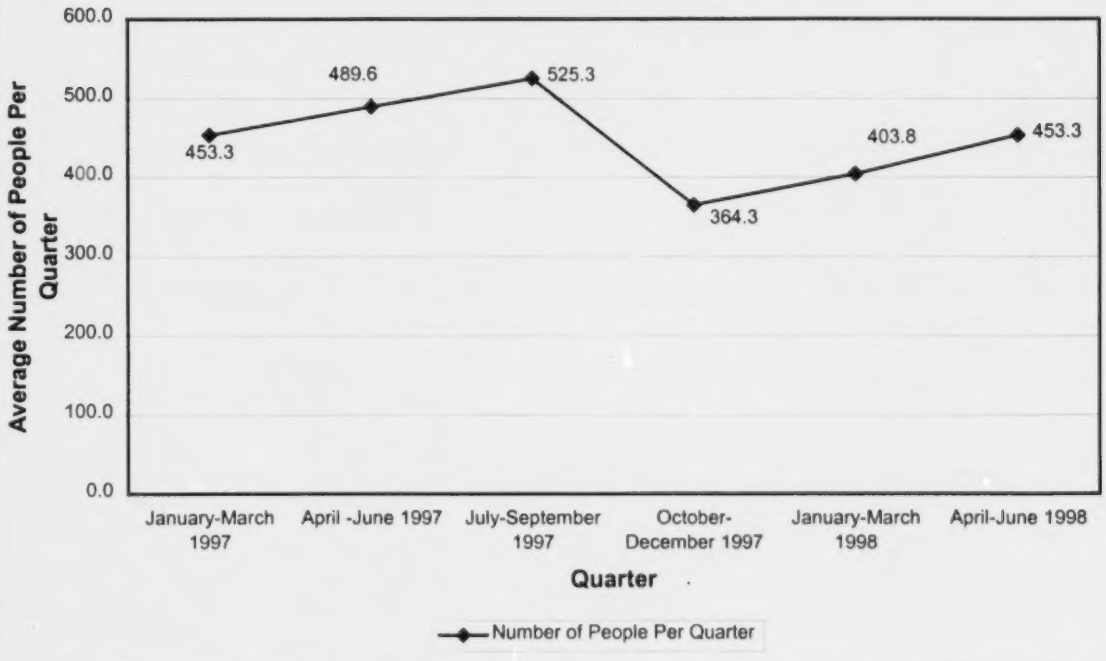


Figure 5. Average Number of Volunteers Involved with InFoPeople Per Quarter.

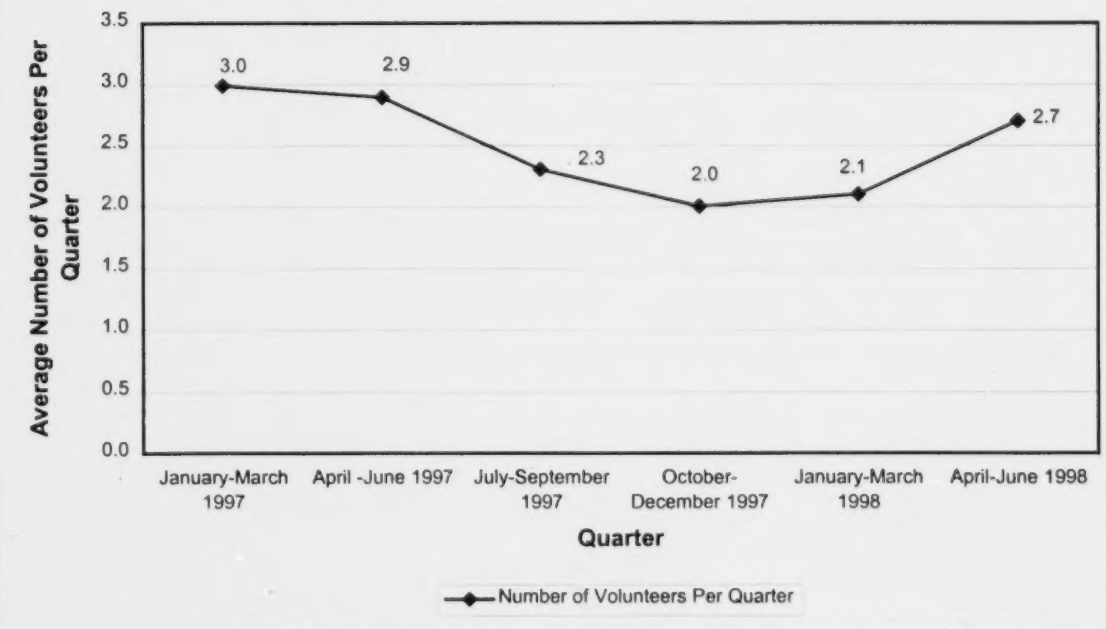


Figure 6. Average Number of Hours InFoPeople Volunteers Contribute Per Quarter.

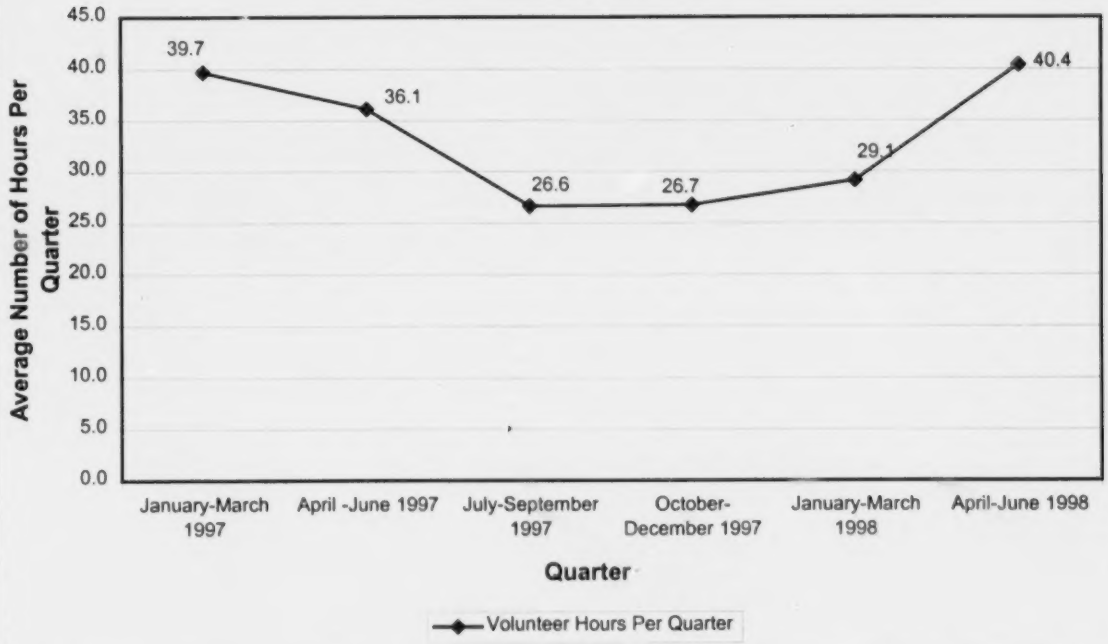


Figure 7. Average Number of People Trained to Use the InFoPeople Workstations Per Quarter.

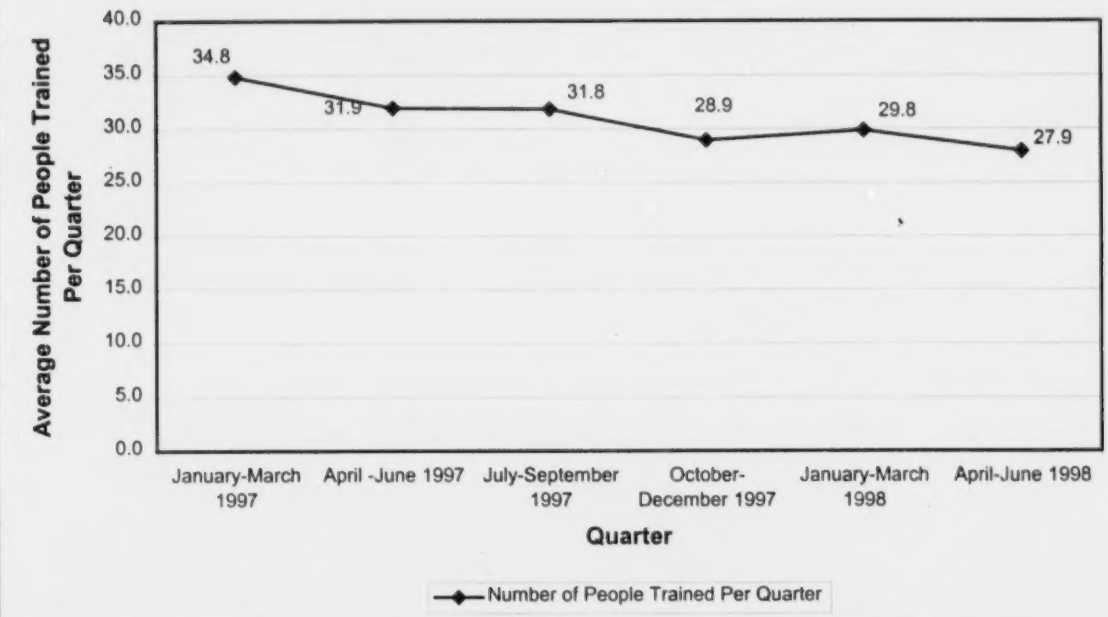


Figure 8. Average Number of Staff Trained Per Quarter.

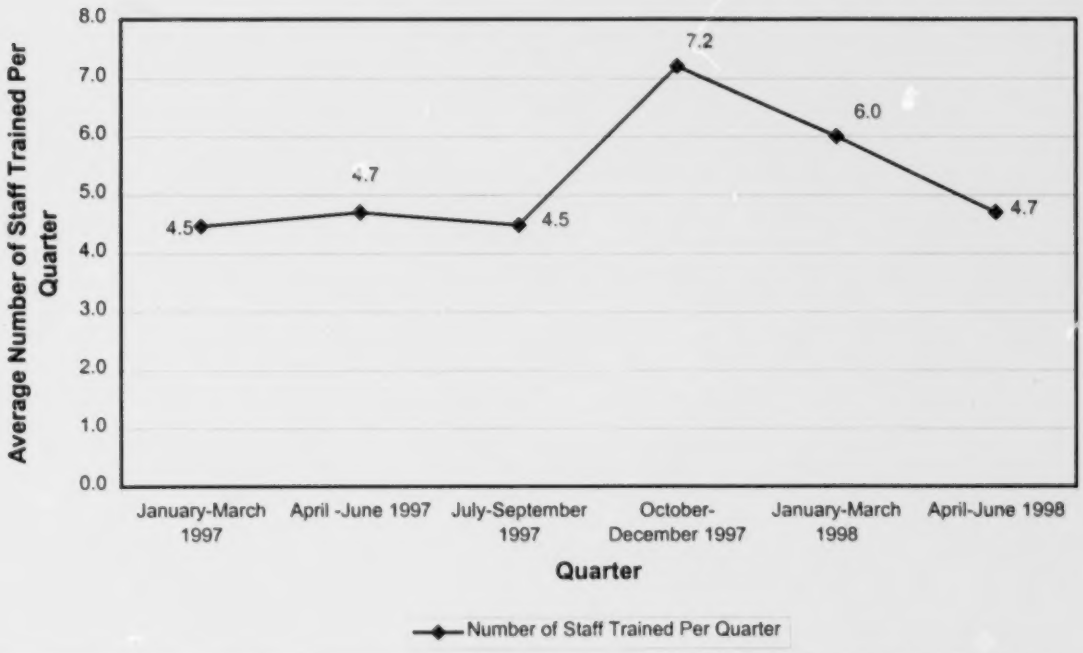


Figure 9. Average Number of Hours of Staff Training Per Quarter.

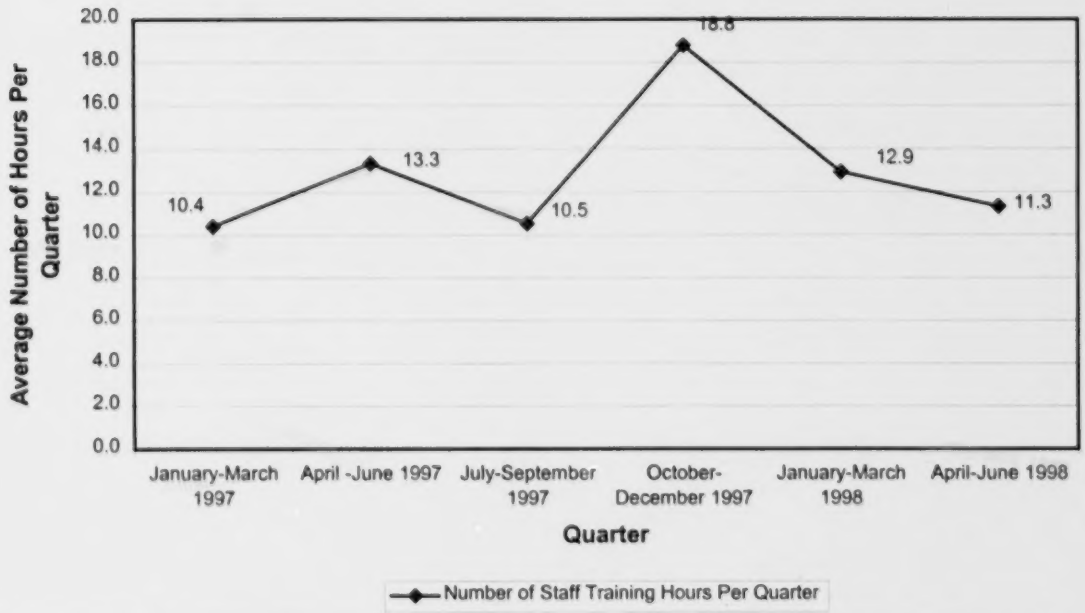


Figure 10. Average Number of Staff Hours Spent Using the InfoPeople Workstations.

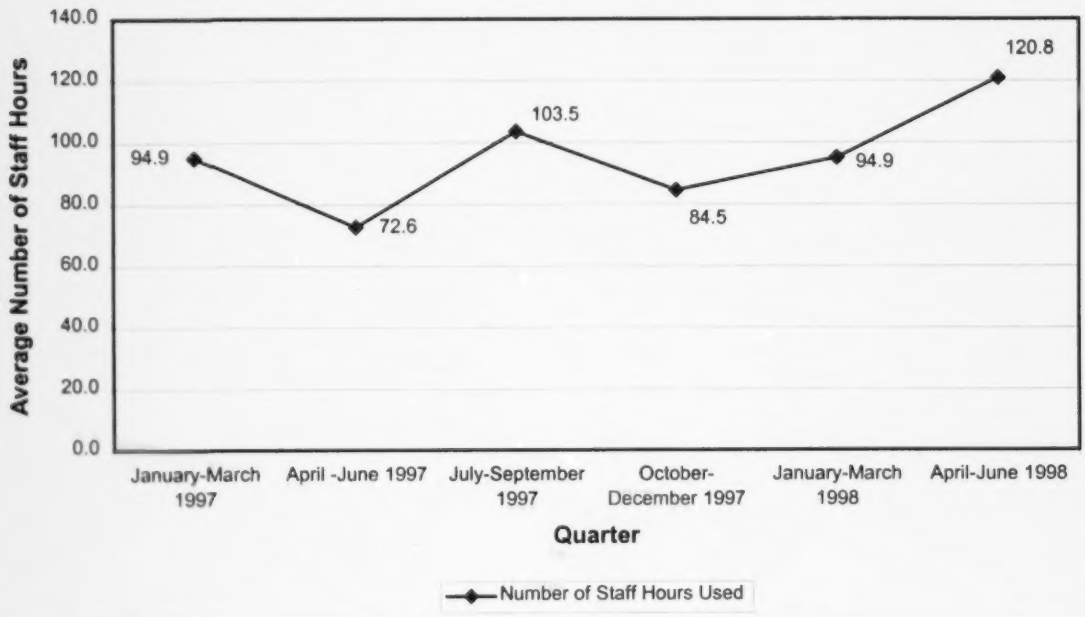
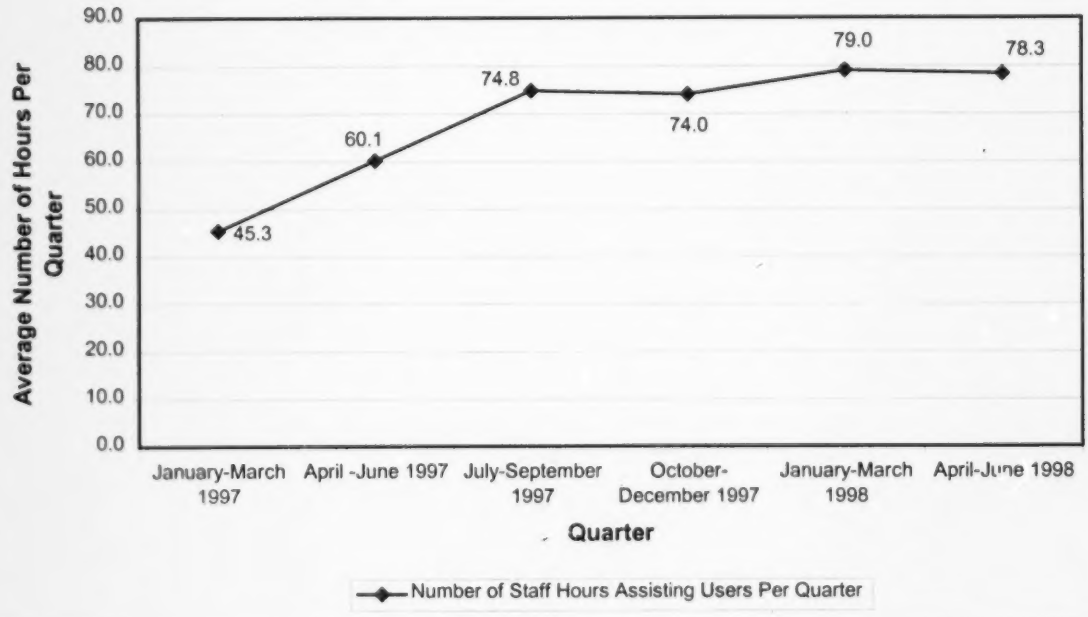


Figure 11. Average Number of Staff Hours Assisting Users Per Quarter.



Overall, the average number of staff hours spent using the InFoPeople workstations has increased over time. During the January-March 1997 quarter, and average of 94.9 staff hours were spent using the InFoPeople workstations (see Figure 10). The number of staff hours spent using the InFoPeople workstations increased to 120.8 during the April-June quarter (see Figure 10).

A point of interest is that the amount of time spent assisting patrons use the workstations has nearly doubled from 45.3 hours during the January-March 1997 quarter to 78.3 hours during the April-June 1998 quarter (see Figure 11).

Summary

The quarterly report data show, over time, that the number of:

- Hours the workstations are available decreased slightly;
- Volunteers involved in the project increased remained relatively constant;
- Hours volunteers contribute decreased;
- Hours of training the staff received, with some fluctuation, remained constant;
- Staff hours using the workstations increased;
- Number of users trained to use the workstations/Internet decreased slightly; and
- Number of hours that staff assisted patrons use the workstations nearly doubled.

Other data show distinct trends that coincide with the change in the quarterly reporting form beginning with the October-December 1997 quarter:

- The average number of people using the InFoPeople workstations increases from 453.3 to 525.3 from the January-March 1997 through July-September 1997 quarters, and then increased from 364.3 to 453.3 from the October-December 1997 through April-June 1998 quarters;

- The average number of hours that the InFoPeople workstations are connected to the Internet increases from 367.7 to 442.2 from the January-March 1997 through July-September 1997 quarters, and then increased from 331.3 to 368.5 from the October-December 1997 through April-June 1998 quarters; and

- The average number of staff trained remained nearly constant (4.5-4.7) from the January-March 1997 through July-September 1997 quarters, and then decreased from 7.2 to 4.7 from the October-December 1997 through April-June 1998 quarters.

It is not possible, based on the data in the quarterly report data sets, to determine the reasons for the increases and/or decreases experienced in the various activities. Discussions with InFoPeople project and state library staff indicate, however, that there are several factors that contribute to the changes in the data. These include the:

- Modifications in the reporting form that occurred beginning with the October-December 1997 quarter;

- Cyclical nature of the InFoPeople project;

- Differing demographics of the InFoPeople project participating libraries throughout Cycles One, Two, and Three; and

- Misunderstanding of participant reporting requirement obligations, with (for example) Cycle Two libraries not reporting as Cycle Three libraries came on board during the October-December 1997 quarter due to their assumption that their reporting requirements ended with the 1996/1997 fiscal year.

It is not possible to determine the exact impact of each of these factors on the reported quarterly data. Collectively, however, these factors do contribute to some of the variance demonstrated by the quarterly report data.

Isssues and Recommendations Concerning the Quarterly Report Data/Reporting Process

The analysis and organization of the quarterly report data identified several issues that exist with the raw data, the reporting process, and other related factors. Based on the study team's experience with the data, the following are recommended for future quarterly report data collection activities:

1. Consistency of the variables collected. While the changing nature of the project and technology will necessitate modifications to the data collected from the sites, it is important to keep the variables on the form as consistent as possible so as to ensure that the same data are collected over time. This will facilitate the presentation of longitudinal data that are in fact comparable.

2. Consistency of what is collected about the data variables. Some of the data collected between the January-March 1997 and July-September 1997 quarters was weekly, whereas this was changed to quarterly beginning with the October-December 1997 quarter.

3. Create an intelligent reporting form. Some sites entered the hours of public access data by multiplying the number of workstations in the branch by the number of hours the branch is open. Others reported the same data only for one workstation even though more existed within the site. Others include non-InFoPeople workstations in their report. The project coordinators know how many workstations are at a particular site and could build a form that does the multiplication of workstations by hours automatically for each entry.

4. Create a form that limits entries. In the future, reporting forms should limit the responses of site contacts to those appropriate to the field. This could be done through the creation

of pull-down boxes, as well as the insertion of "invalid entry" data types. Site contacts should also be prohibited from using previous forms for current data entry activities.

5. Create a report codebook that documents all the data elements, form design, and entry documentation. There needs to be an authoritative documentation source for all project-related data collection efforts that others can reference.

6. Hold periodic training sessions/tutorials on the data entry process. Site contacts need to know how to enter the data correctly into the forms, particularly when changes occur to the form itself. These training sessions/tutorials should also include some of data analysis so that contacts can see the impact and/or use of the data they provide.

Minimally, these issues need to be addressed as additional and future data collection activities occur through the project.

USER SURVEYS

Since the inception of the InFoPeople project, the project administrators created an on-going online user survey that gives users the opportunity to provide feedback to the administrators. This survey is available for completion by users at <http://InFoPeople.berkeley.edu:8000/ipeval.html>. To date, the survey has generated approximately 1,550 responses.

General User Information

Users indicate that they discovered InFoPeople in the library -- 46.4% -- followed by 22.6% elsewhere, and 12.3% from library staff (see Figure 12). A majority of respondents -- 45.7% -- indicated that this was the first time they were using InFoPeople, followed by 17.2% that use InFoPeople often, 16.4% weekly, and 13.2% monthly (see Figure 13).

Of particular interest is that 49.8% of InFoPeople workstation users have access to the Internet outside the library, while another 43.0% do not (see Figure 14).

Internet-based Information Sought by Users

Overall, 49.0% of users use the InFoPeople workstations to explore the Internet, followed by 45.5% who use the Internet to conduct research, 45.4% who use the Internet to pursue personal interest/hobbies, 28.[illegible]% who use the Internet for other reasons, 27.4% who use the Internet for school assignments, 26.8% who use the Internet to locate specific information, and 21.2% who use the Internet to find job-related information (see Figure 15).

Nearly 58.0% of users claim to find the information they want on the Internet half the time or almost always (see Figure 16). Only 2.3% claim to almost never find the information that they want on the Internet.

Most users -- 87.9% -- find it moderately easy or easy to use the Internet at the library (see Figure 17). Only 8.9% of users indicate that it is difficult to use the Internet at the library. This is a striking finding, as only 20.6% of the users consider themselves to be computer experts (see Figure 18). Indeed, a majority of users -- 55.0% -- indicate that they have only some experience with computers.

Future InFoPeople Improvements

As discussed above, users indicate their satisfaction with the Internet access made possible in libraries through the InFoPeople project. Users do, however, have suggestions for making the Internet easier to use in the library (see Figure 19):

- Higher speed connection, 43.5%;
- Better computers/more computers/more software, 36.3%;
- More Internet functions offered, 31.9%;
- Written manuals/tip sheets, 19.2%;
- Offer training classes, 18.8%;

- Have different policies (e.g., time limits), 18.0%; and
- Offer one-on-one instruction, 15.2%.

Thus, users most want access to more public access workstations that have higher connection speeds.

Figure 12. How Patrons Found Out About InFoPeople.		
n=1,550	Number of Responses	Percentage
Elsewhere	351	22.6%
Handout	93	6.0%
In Library	719	46.4%
Newspaper	78	5.0%
Staff	191	12.3%
No Response	118	7.6%

Figure 13. Patron Frequency of Use of InFoPeople Workstations.		
n=1,550	Number of Responses	Percentage
First Time	708	45.7%
Monthly	205	13.2%
Often	266	17.2%
Weekly	254	16.4%
No Response	117	7.5%

Figure 14. Patron Access to the Internet Other than through InFoPeople.		
n=1,550	Number of Responses	Percentage
Yes	772	49.8%
No	666	43.0%
No Response	112	7.2%

Figure 15. Types of Information Patrons Seek while using InFoPeople Workstations.		
n=1,550	Number of Responses	Percentage
Health	263	17.0%
Research	706	45.5%
Specific Subject	416	26.8%
Government Information	268	17.3%
Personal	704	45.4%
Jobs	328	21.2%
Exploring	759	49.0%
School	424	27.4%
Other	441	28.5%
Percentages will not total to 100%, as respondents could select all answers that applied.		

Figure 16. How Often Patrons Find the Information They Want.		
n=1,550	Number of Responses	Percentage
Almost always	536	34.6%
Almost never	49	3.2%
Can't judge	291	18.8%
Half the time	362	23.4%
Occasionally	190	12.3%
No Response	122	7.9%

Figure 17. Patron Assessment of Ease of Use of InFoPeople.		
n=1,550	Number of Responses	Percentage
Difficult	138	8.9%
Easy	690	44.5%
Moderately Easy	518	33.4%
No Response	204	13.2%

Figure 18. Patron Assessment of their Computer Skills.		
n=1,550	Number of Responses	Percentage
Beginner	263	17.0%
Some Experience	852	55.0%
Expert	319	20.6%
No Response	116	7.5%

Figure 19. Patron Recommendations for Improvements to InFoPeople Workstations/ Service.		
n=1,550	Number of Responses	Percentage
Higher Speed	674	43.5%
Better computers/more computers/more software	562	36.3%
One-on-One Instruction	235	15.2%
Offer Classes	292	18.8%
Manuals/Tip Sheets	298	19.2%
More Functions	494	31.9%
Different Policies	279	18.0%
Percentages will not total to 100%, as respondents could select all answers that applied.		

EVALUATION PROJECT DATA COLLECTION ACTIVITIES

SITE CONTACT SURVEY

The study team conducted a survey of all 420 InFoPeople project site contacts during September and October 1998. The intent of the survey was to collect:

- Demographic information on the site contacts;
- Background information on the number of library general and InFoPeople public access Internet workstations;
- Public access speed of connection data;
- Assessment data concerning the contacts, site libraries, and InFoPeople project; and
- Impact, benefit, and key issue information concerning the InFoPeople project.

Of the 420 surveys, 325 were returned for a 77.3% response rate. See Appendix I for a copy of the site contact survey.

The survey packet that was sent to the site contacts in September 1998 also included a survey for the library's community partner (See Appendix J for a copy of the survey). As indicated below in Figure 22, 44.6% of the respondents indicated that the library had a community partner for the InFoPeople project. The response rate for the community partner survey, however, was less than 20%, thus would not provide generalizable community partner data. {As such, the community partner survey was not analyzed for this report.}

Site Contact Demographics

An overwhelming percentage of InFoPeople contacts – 89.8% – are librarian staff (see Figure 20). Contacts tend to be branch/site supervisors (52.6%), followed by reference/adult services librarians (24.6%), children/young adult services librarians (9.2%), and systems/electronic services librarians (4.3%). In all, contacts have spent an average of 7.8 years in their current position, 12.6 years in the library jurisdiction, and 7.1 years at the branch/site (see Figure 20). Contacts are an average of 47.5 years old, and have a graduate degree (see Figure 21).

Library Internet Public Access Services

Over half, 56.6%, of participating libraries have 2 or fewer public access Internet workstations (see Figure 23). Nearly all -- 92.2% -- of participating libraries received 2 or fewer public access Internet workstations from InFoPeople. Of those, 71.1% received a single workstation from InFoPeople (see Figure 23).

Public access Internet speeds vary from 14.4kbps to T1 (see Figure 23). Nearly one-third, 32.%, of the participating libraries have a maximum public access speed of T1, followed by 22.5% with 14.4kbps-33.6kbps, 12.9% with ISDN, and 8.9% with 56kbps. It is important to note that 23.4% of site contacts could not identify the maximum speed of their library's public access connection.

Figure 20. Site Contact Position, Responsibilities, and Years in Library.

Position n=325		Responsibility n=325		Years in Position n=325	Years at Jurisdiction n=325	Years at Branch/Site n=325
Librarian Staff	89.8%	Branch/Site Supervisor	52.6%	7.8 years SD=6.5 years	12.6 years SD=8.0 years	7.1 years SD=6.1 years
Non-librarian Staff	8.0%	Reference/Adult Services	24.6%			
Other	1.5%	Children/Young Adult services	9.2%			
No Response	0.6%	Systems/ Electronic Services	4.3%			
		Other	0.0%			
		No Response	1.5%			

Figure 21. Site Contact Level of Education and Age.

Education n=325		Age n=291
High School/Equivalent	0.9%	47.5 years SD=8.1 years
Some College	6.5%	
Community College	2.5%	
College	8.6%	
Graduate School	77.2%	
Professional Degree	3.4%	
No Response	0.9%	

Figure 22. InFoPeople Project Participant Community Partners.

(n=325)	
Yes	44.6%
No	52.6%
No Response	2.8%

Figure 23. Number of Branch/Site Public Access Workstations and Workstations Provided by the InFoPeople Project.

Public Access Internet Workstations at Site (n=325)		Number of Public Access InFoPeople Workstations (n=325)		Fastest Public Access Internet Connectivity (n=325)	
1	33.8%	1	71.4%	14.4kbps-33.6kbps	22.5%
2	22.8%	2	17.8%	56kbps	8.9%
3	9.2%	3	1.5%	ISDN	12.9%
4	9.2%	4	1.8%	T1	32.3%
5	4.9%	5	0.6%	Don't Know	23.4%
6	5.8%	6	0.3%		
7	3.7%	7	0.3%		
8	2.8%	No Response	6.2%		
9	.3%				
10	1.5%				
10+	5.2%				
No Response	0.6%				

Assessment of the InFoPeople Project

Site contacts were asked to assess themselves, their branches/sites, and the InFoPeople Project along various issues/criteria. Below are the results of those assessments.

Contact Self-Assessment

In general, site contacts agree that they are (see Figure 24) (1=Strongly Agree, 5=Strongly Disagree):

- Knowledgeable about the Internet with a rating of 2.4;
- Have good skills in terms of using the Internet with a rating of 2.3; and
- Willing to spend their own time and money to obtain technology training with a rating of 2.7.

Contacts disagree, however, that they have to commit too much time to the InFoPeople project with a rating of 4.1.

Branch/Site Assessment

For branch/site related issues, contacts agree that (see Figure 25) (1=Strongly Agree, 5=Strongly Disagree):

- Users are pleased with access to the Internet at the branch/site with a rating of 1.7;
- Providing high-quality public access to the Internet is an important goal with a rating of 1.7;
- Their branch/site's public access and information technology use policies are well developed with a rating of 2.4;
- Staff Internet skills are excellent with a rating of 2.7; and
- Their branch/site relies on a current and well-developed information technology plan with a rating of 2.9.

Contacts tend to disagree, however, that (see Figure 25) (1=Strongly Agree, 5=Strongly Disagree):

- Library patrons receive excellent training to use the public access workstations with a rating of 3.1;
- There is someone readily available to fix computer or other information technologies with a rating of 3.2;
- There are adequate public access workstations at their branch/site with a rating of 3.5;
- Their branch/site does an excellent job of leveraging access to the Internet through collaborations with the site community partner with a rating of 3.7; and
- Their site conducts ongoing user-based quality and impact assessments of the impact of technology-based services with a rating of 3.8.

Figure 24. InFoPeople Site Contact Self-Assessment of Project-Related Issues.	
Issue	**Mean**
I would assess myself as being *very knowledgeable* about the Internet	2.4 (n=322)
I would assess my *skills* in terms of *using* the Internet as very good	2.3 (n=321)
Training in information technology is so important that I will have to spend some of my own time and money to obtain such training	2.7 (n=321)
I have had to commit too much time and energy to participating in the InFoPeople project	4.1 (n=321)
1=Strongly Agree	5=Strongly Disagree

Figure 25. InFoPeople Site Contact Branch/Site Assessment of Project-Related Issues.	
Issue	**Mean**
My branch/site relies on a current and well-developed strategic plan for deploying and using information technologies	2.9 (n=312)
There are adequate public access Internet workstations at my branch/site	3.5 (n=320)
When I need help to have someone fix the computer or other information technologies, they are readily available and come promptly	3.2 (n=321)
Library patrons receive excellent training for their use of public access Internet workstations	3.1 (n=320)
Our branch/site conducts regular ongoing assessments of the quality and impact of technology-based services on library *users*	3.8 (n=319)
My branch/site's policy(ies) related to public access and use of information technologies is very well developed	2.4 (n=320)
Overall, the skills of the staff at my branch/site related to the Internet are excellent	2.7 (n=319)
Users seem to be genuinely pleased with the access to the Internet at my branch/site	1.7 (n=318)
My branch/site does an excellent jot of leveraging its access to and use of the Internet through collaborations with our community partner	3.7 (n=276)
Providing high-quality public access to the Internet is an important goal for our branch/site	1.7 (n=318)
1=Strongly Agree	5=Strongly Disagree

Figure 26. InFoPeople Site Contact InFoPeople Project Assessment.	
Issue	**Mean**
InFoPeople training programs for knowing how to use the Internet are excellent	1.5 (n=312)
The goals of the InFoPeople project are very clear to me	1.7 (n=320)
I regularly use the InFoPeople's Web site to obtain various project information	2.9 (n=315)
Overall, our community partner has been very involved in the InFoPeople project	3.6 (n=280)
The California state library should develop more programs like the InFoPeople project	1.7 (n=315)
Participation in the InFoPeople project has brought our library improved visibility	2.0 (n=316)
Participation in the InFoPeople project has brought us computing and telecommunications equipment that we would otherwise not have obtained	1.9 (n=315)
Participation in the InFoPeople project has improved the overall quality of our public access Internet services significantly	1.7 (n=317)
Participation in the InFoPeople project has improved the overall staff skills in Internet use significantly	1.9 (n=317)
Participation in the InFoPeople project has *not* been worth the effort	4.6 (n=317)
1=Strongly Agree	5=Strongly Disagree

Figure 27. InFoPeople Site Contact InFoPeople Project Assessment for Participants with and without Community Partners.		
Issue	**Mean with Partner**	**Mean No Partner**
InFoPeople training programs for knowing how to use the Internet are excellent	1.4	1.6
The goals of the InFoPeople project are very clear to me	1.5	1.9
I regularly use the InFoPeople's Web site to obtain various project information	2.6	3.1
Overall, our community partner has been very involved in the InFoPeople project	2.7	4.5
The California state library should develop more programs like the InFoPeople project	1.6	1.8
Participation in the InFoPeople project has brought our library improved visibility	1.8	2.2
Participation in the InFoPeople project has brought us computing and telecommunications equipment that we would otherwise not have obtained	1.6	2.2
Participation in the InFoPeople project has improved the overall quality of our public access Internet services significantly	1.4	2.0
Participation in the InFoPeople project has improved the overall staff skills in Internet use significantly	1.7	2.0
Participation in the InFoPeople project has *not* been worth the effort	4.8	4.5
1=Strongly Agree	5=Strongly Disagree	
Statistical tests show that all mean differences are statistically significant at the .05 level.		

InFoPeople Project Assessment

Overall, site contacts agree that (see Figure 26) (1=Strongly Agree, 5=Strongly Disagree):

- The InFoPeople Internet training programs are excellent with a rating of 1.5;
- The goals of the InFoPeople project are clear with a rating of 1.7;
- The California state library should develop more programs like the InFoPeople project with a rating of 1.7;
- Participation in the InFoPeople project has improved significantly the overall quality of the branch/site public access Internet services with a rating of 1.7;
- Participation in the InFoPeople project improved staff Internet skills with an rating of 1.9;
- Participation in the InFoPeople project provided the branch/site with telecommunications and computing equipment it otherwise would not obtain with a rating of 1.9;
- Participation in the InFoPeople project improved the visibility of the library with a rating of 2.0; and
- They regularly use the InFoPeople Web site to obtain project-related information with a rating of 2.9.

Contacts disagree, however, that (see Figure 26) (1=Strongly Agree, 5=Strongly Disagree):

- The branch/site community partner has been very involved with the InFoPeople project with a rating of 3.6, and
- Participation in the InFoPeople project is not worth the effort with a rating of 4.6.

Thus, participants overwhemingly indicate their support for the InFoPeople project.

InFoPeople Assessment and Community Partners

To further analyze the site contact survey, the InFoPeople project assessment data were analyzed by those libraries that indicated the existence of a community partner versus those libraries that did not have a community partner. This allows the study team to provide some assessment of the impact of community partners in the InFoPeople project.

As Figure 27 shows, the impact of community partners in the InFoPeople project is pronounced. In every instance, those libraries that have community partners indicate stronger agreement that the InFoPeople project is beneficial to the participating branch/site. Thus, having a community partner promotes:

- More involvement;
- Better visibility;
- Better public access services;
- Improved staff Internet skills; and
- Better understanding of the InFoPeople project goals.

As such, the community partner is an important component of the InFoPeople project.

Benefits, Impacts, and Issues

A final component of the site contact survey was a series of open-ended questions that asked the contacts to identify the key benefits, impacts, and issues of participation in the InFoPeople project. The results of these questions are presented below.

Methodology

There were eight open-ended survey questions, which were analyzed in a straightforward manner. One individual was responsible for coding and analyzing the 325 surveys that contained open-ended answers. The study team:

- Created natural language topics to fit the sense of the answers to each question;
- Entered the topics into a spreadsheet, with one worksheet per question; and
- Tallied the number of times each topic appeared in the survey answers.

After coding the set of surveys, it was possible to consolidate some of the original topics into broader, more inclusive topics. This facilitated the analysis by making the responses to some of the categories more appropriate for interpretation and presentation. The individual then tallied the number of responses in each topic category and the total number of responses to each question. The individual then also calculated the percentage of answers for each topic in comparison to the total answers for the question. The results are presented in Figures 28 through 34.

Benefits, Impacts, and Suggested Improvements for InFoPeople

Contacts consider the two most significant benefits of the InFoPeople project for them to be the training workshops offered through InFoPeople (29.6%) and Internet training sessions (26.1%) (see Figure 28).

The most significant benefits of the InFoPeople project for the branch/site, according to the contacts, is the provision of Internet access with 26.6% and the ability to purchase additional equipment related to Internet connectivity with 20.1% (see Figure 29).

For the community, the contacts indicate that the most significant impacts of the InFoPeople project is access to the Internet with 25.6% and free public Internet access with 23.5% (see Figure 30).

Contacts indicate that the most significant problems that their branches/sites face in participating in the InFoPeople project are the (see Figure 31):

- Continued funding for connectivity with 13.4%
- Need for additional workstations with 12.7%; and
- Need for equipment maintenance and upgrades with 12.1%.

Figure 28. The Most Important Benefit from Participating in the InFoPeople Project to the Site Contact.

Topic	Number of times mentioned	Percentage of all responses
Internet training workshops: excellent, easy to understand, accessible instructors - searching, navigation, reference	220	55.7%
Internet access	36	9.1%
Obtaining equipment (hardware and software)	23	5.8%
Increased access to information for staff; better able to answer reference questions	19	4.8%
Able to exchange information with other librarians	15	3.8%

Figure 29. The Most Important Benefit from Participating in the InFoPeople Project to the Branch/Site.

Topic	Number of times mentioned	Percentage of all responses
Internet access	106	26.6%
Able to purchase equipment: for example, computers, printers, T1 line	80	20.1%
Staff training: on use of Internet, computer literacy, to facilitate public use	68	17.0%
Earlier access to the Internet than library would otherwise have been able to provide	29	7.3%
Internet increases access to information, improves reference service	28	7.0%
Internet access and/or InFoPeople project increases library's visibility, and public's awareness of and usage of the library	21	5.3%

Figure 30. The Most Important Benefit from Participating in the InFoPeople Project to the Branch/Site Community.

Topic	Number of times mentioned	Percentage of all responses
Internet access	97	25.6%
Free access to the Internet; or "access for people who otherwise would not have it"	89	23.5%
Able to offer training to the public (often for free)	32	8.4%
Trained librarians better able to assist patrons with Internet	30	7.9%
Equipment	29	7.7%
Increased access to information	27	7.1%

Figure 31. The Most Important Problem Facing the Future Development of the InFoPeople Project.		
Topic	**Number of times mentioned**	**Percentage of all responses**
Funding: for ongoing expenses, to continue project	41	13.4%
Equipment: need money for additional terminals; wiring	39	12.7%
Equipment: maintenance, upgrading, keeping current	37	12.1%
Funding for future training, continuing training	23	7.5%
Being able to keep abreast of current technology changes	17	5.5%
Being able to keep up with the public's demand for Internet access	17	5.5%

Figure 32. Site Contact Recommendations to Improve the InFoPeople Project.		
Topic	**Number of times mentioned**	**Percentage of all responses**
Provide more funding to purchase more terminals for staff and public	43	10.4%
Make training as geographically close as possible, at more sites, or onsite	41	9.9%
Provide more training	37	9.0%
Allow more staff to attend training	29	7.0%
Provide more money for upgrading hardware, software: for example, need T1 line or cable	21	5.1%
Provide follow-up training, continuing education	15	3.6%

To improve the InFoPeople project, contacts recommend (see Figure 32):

- Providing more funding to purchase more terminals for staff and public with 10.4%;
- Making training as geographically close as possible, at more sites, or onsite with 9.9%;
- Providing more training with 9.0%; and
- Allowing more staff to attend training with 7.0%.

Thus, recommended improvements to the InFoPeople project center primarily on training issues and the need for additional workstations.

Training

With regards to training, project contacts indicated the need for training in (see Figure 33):

- Web-related areas such as Web page design and Java (11.4%);
- Technology troubleshooting (10.1%);
- Internet searching (7.0%) and continuing education in Internet searching (8.3%);
- New and emerging technologies (5.4%); and
- Internet reference (4.3%).

For a vast majority of such classes, the contacts would be willing to pay $1.00 to $50.00 to offset the costs of instruction (see Figure 33).

Figure 33. Contact Continuing Education/Training Requests and Willingness to Pay for a One-Day Workshop.

Topic/Price	Number of times mentioned	Percentage of all responses
Webpage design: HTML, website management, java, graphics, animation, images, interactive	55	11.4%
$0	3	5.5%
$1-$25	15	27.3%
$26-$50	22	40.0%
More than $50	10	18.2%
No amount given or library would pay	5	9.1%
Trouble-shooting: hardware, software, Internet; computer maintenance and repair	49	10.1%
$0	3	6.1%
$1-$25	24	49.0%
$26-$50	8	16.3%
More than $50	11	22.4%
No amount given or library would pay	3	6.1%
More classes on or continuing education for Internet searching	40	8.3%
$0	9	22.5%
$1-$25	12	30.0%
$26-$50	11	27.5%
More than $50	3	7.5%
No amount given or library would pay	5	12.5%
Advanced Internet searching	34	7.0%
$0	8	23.5%
$1-$25	9	26.5%
$26-$50	6	17.6%
More than $50	7	20.6%
No amount given or library would pay	4	11.8%
Overview of what's new: new technology related to library services; upgrades to software, hardware and security; terminology	26	5.4%
$0	-	-
$1-$25	10	38.5%
$26-$50	13	50.0%
More than $50	1	3.8%
No amount given or library would pay	2	7.7%
Internet reference: how to integrate Internet into reference services, ready reference on the Internet, evaluating search engines from reference standpoint	23	4.8%
$0	2	8.7%
$1-$25	12	52.2%
$26-$50	2	8.7%
More than $50	1	4.3%
No amount given or library would pay	6	26.1%

Figure 34. Additional Information, Anecdotes, and Suggestions by the InFoPeople Contacts.		
Topic	**Number of times mentioned**	**Percentage of all responses**
Program is wonderful; thank you!	46	23.0%
Training is excellent, trainers are excellent	28	14.0%
Computers and internet access are very popular with the community; they have improved library's image	19	9.5%
InFoPeople staff are great	6	3.0%
Patron demand for Internet is incredible; no need to publicize service	6	3.0%
Patrons have had access to information increased; reference service is improved	6	3.0%

Additional Information and Suggestions

The contact survey asked respondents to comment on additional aspects of the InFoPeople project. Contacts expressed their enthusiastic support for the project. In particular, contacts consider the project to be "wonderful" (23.0%), and find the training to be "excellent" (14.0%) (see Figure 34).

Comments on Data Analysis

One potential source of useful project information is to conduct crosstabulation analysis such as that in Figure 27 above. This type of analysis allows project administrators and participants to review and analyze survey data by various demographic groups and other criteria.

The study team conducted such analysis for all surveys – the quarterly survey, user survey, and liaison survey. Except for the liaison survey, the crosstabulation analysis did not result in any significant and/or notable differences. This does not mean, however, that future crosstabulation analysis would not yield noteworthy or significant results.

COMMUNITY PARTNER SURVEY

The community partner did not enjoy a high response rate (see Appendix J for a copy of the community partner survey). Indeed, of the 420 surveys sent to the site contacts, only 38 completed responses were returned. This response rate, however, is in the context that only 44.6% of the library liaisons (approximately 187 of the library sites) indicated that they had a community partner at the time of answering the survey. Thus, the response rate is approximately 20%. Given that response rate, the surveys were not analyzed formally through statistical software. Rather, the responses were reviewed by the study team for general themes.

The low response rate can be attributed, in part, to the fact that often-times the community partners are very active during the initial stages of the project and then become less active once the project is initiated. The low response rate might also be due to the "two step" administrative process in which the library liaisons received the survey and then had to deliver it to their community partner. This section offers some summary comments about responses to the survey, but because of the low response rate, one should be very careful about drawing any firm conclusions about the community partners in general.

Of the 38 responses, 10 (26.32%) came from community partners in Cycle 1 libraries, 11 (28.95%) came from community partners in Cycle 2 libraries, and 17 (44.74%) came from community partners in Cycle 3 libraries.

Most of the community partners who responded have participated in a wide variety of the activities listed in question 6. The vast majority of respondents also indicated that they were participating in multiple activities, indicating that community partners are active in their libraries in multiple roles.

Part II of the survey asked respondents to assess the degree to which they agreed with a series of ten statements. The surveys showed that respondents feel knowledgeable about the Internet and think that providing high-quality public access to the Internet is an important goal for their libraries. Respondents also feel that both the goals of the InFoPeople project and the roles of the community partner are clear.

There was more variation in response to the statement regarding how involved the respondent's library had been in the InFoPeople project: the partners perceived different levels of involvement with the project. Yet, respondents felt that participating in the InFoPeople project had brought their libraries more visibility. Respondents overwhelmingly answered in the negative to the statement that participation in the InFoPeople project had *not* been worth the effort.

Respondents indicated that they feel the community partner aspect of the InFoPeople project is important. However, there were decidedly mixed responses to the statement regarding whether the community partner communicates with the library about his or her role on a regular basis. In addition, there was also a mixed response to how well respondents felt they had been kept informed by the library about InFoPeople project activities. This could indicate that libraries which have community partners should find a way to communicate more effectively or

more often with their community partners, encouraging both feedback from the community partners and providing information to community partners to keep everyone involved and on the same wavelength.

Part III of the survey asked respondents to answer five open-ended questions. Question 17 asked respondents to indicate what is the single-most important benefit for their organizations from participating as a community partner. Several respondents indicated that they felt bringing library patrons access to the Internet was the most important benefit. Others indicated that the greatest benefit was making library patrons more aware of the services and benefits provided by libraries, bringing more patrons into libraries, and increasing libraries' visibility. Other respondents indicated that the training they had received as a community partner or that meeting other business people in the community was the greatest benefit.

Question 18 asked respondents to identify the single-most important benefit from the InFoPeople project to the community. Respondents overwhelmingly stated that providing Internet access to library patrons was the most important community benefit. Also highlighted were introducing library patrons to computers and the Internet and providing Internet instruction to library patrons. Another set of respondents indicated that the most important benefit to the community was the increased public access to information.

Question 19 asked respondents to identify the single-most important problem facing the InFoPeople project's future development.. Some respondents indicated that adequate access to hardware, software, adequate Internet access speed, and current equipment was the single-most important problem. Others stated that funding, and funding for Internet access for very remote communities, was most troublesome. Some respondents stated that it is difficult to find and hold onto community partners and other volunteers while others wondered in what direction the InFoPeople project could travel in the future. Finally, some respondents indicated that maintaining good communication between InFoPeople staff, library staff, and community partners was problematic.

In response to question 20, what one recommendation would you make to improve the InFoPeople project, respondents answered: provide more hardware, provide more workshops and have them more locally accessible for library staff and community partners, and find a way to increase the publicity for the InFoPeople project. Interestingly, several respondents spoke of the need to create a newsletter for community partners about project activities, the need for an online community for community partners, and the need for community partners to communicate directly with InFoPeople staff, either through e-mail or some other method. These comments indicate that some change might be needed in the way communication is currently occurring for community partners involved in the InFoPeople project.

Finally, question 21 asked respondents to share any additional information, anecdotes, suggestions, or comments they may have had about the InFoPeople project. Many respondents indicated that the workshops and regional meetings had been very good. Others stated how pleased they were that adults, seniors, and parents were accessing the Internet now because of the availability of hardware, community partners, and training at the libraries. Some respondents

indicated they were happy their library had participated in the InFoPeople project and that they wished they had more time to give to being a community partner.

On the whole, the small number of community partners who answered this survey are finding the experience rewarding for both themselves and their libraries. The only negative aspect which might be drawn out of the survey results is that there may not be adequate communication between community partners, their libraries, and the InFoPeople project.

SUMMARY OF SURVEYS

Overwhelmingly, users and contacts find the InFoPeople project to be extremely useful, successful, and rewarding. Specifically, users, contacts, and community partners indicate that InFoPeople provides a(n):

- Means for the public to access the Internet;
- Means to gain access to Internet- and network-based information resources;
- Vehicle for gaining familiarity with the Internet and Internet-based applications;
- Vehicle for the library to enhance its status in the community, gain community support, and attract new visitors to the library; and
- Collection development and enhancement tool that otherwise would not be available.

These benefits, however, create the need for more -- more workstations, more bandwidth, and more Internet-based services.

COLLECTING/ANALYZING PROJECT INFORMATION

Stage I of the evaluation project shows that it is possible to organize and present a range of data from different sources to present an overview assessing the InFoPeople project. The report presents (1) longitudinal data from the user survey and the quarterly reports as well as (2) a current assessment of the project from a statewide survey of InFoPeople site contacts conducted in September 1998. Project administers will need to continue the longitudinal assessments by using the various PERL scripts as described in the appendices. In addition, Project administrators may wish to repeat selected assessment questions from the site contact survey in the future to compare, longitudinally, responses to those from the September 1998 survey.

While this Stage I report coordinates data and findings from three key assessment instruments (user survey, quarterly reports, and site contact survey), there may be additional project information that should be considered as part of the overall assessment effort. For example participants have submitted "Community Plans" which set forth details of how a given InFoPeople project site will provide public Internet access. The study team determined that 82 of 92 (89%) of the 1997-98 Cycle 3 library sites filed community plans and 129 of 153 (84%) 1995-1996 Cycle 2 library sites filed community plans (as best we can determine from the forms listed on the project Website).

An analysis of these and other community plans could also provide useful data for the assessment of the project. For example, a digest of information from these plans could be compiled on a spreadsheet and be linked to data produced in this Stage I report. Such an analysis would provide helpful contextual information as well as data elements not collected via the three instruments reported in this Stage I report. This analysis is outside the scope of work for the current assessment of the InFoPeople project. We note it as an example of one kind of additional project information that is available. We would expect that there is other project information related to finances, training, and use that might also be available and could be organized into a database of project information.

The Stage II assessment effort will produce a range of additional data from the site visits that will be used and coordinated with the findings reported here. Determinations as to which types of data, the frequency with which that data should be collected, and mechanisms for that collection effort will be discussed in the final report. Overall, however, a key theme that results from Stage I findings is the need to have a carefully developed and administered plan for the collection, organization, analysis, and reporting of InFoPeople project information. Recommendations for how best to accomplish this objective will be included in the Stage II final report.

Appendix A – fileit-ipeval.cgi – Used to take information from the quarterly survey and put it into a UNIX database.

```
#!/usr/bin/perl

  print "Content-type: text/html\n\n";
  &ReadParse;
  $allClear = 1;
  $LibJurisdiction = $in{'LibJurisdiction'};
  if ($LibJurisdiction eq "") {
    print "<b>You did not enter a Library Jurisdiction</b>";
    $allClear = 0;
  }
  $Branch = $in{'Branch'};
  if ($Branch eq "") {
    print "<b>You did not enter a Library Branch</b>";
    $allClear = 0;
  }
  $Name = $in{'Name'};
  if ($Name eq "") {
    print "<b>You did not enter a Name</b>";
    $allClear = 0;
  }
  $Email = $in{'Email'};
  if ($Email eq "") {
    $Email = "";
  }
  $Report_Period = $in{'Report_Period'};
  if ($Report_Period eq "") {
    $Report_Period = "";
  }
  $Hours_Offered = $in{'Hours_Offered'};
  if ($Hours_Offered eq "") {
    $Hours_Offered = "";
  }
  $Hours_Access = $in{'Hours_Access'};
  if ($Hours_Access eq "") {
    $Hours_Access = "";
  }
  $Hours_Connect = $in{'Hours_Connect'};
  if ($Hours_Connect eq "") {
    $Hours_Connect = "";
  }
  $Hours_Down = $in{'Hours_Down'};
  if ($Hours_Down eq "") {
    $Hours_Down = "";
  }
  $People_Using = $in{'People_Using'};
  if ($People_Using eq "") {
    $People_Using = "";
  }
  $Volunteers_Number = $in{'Volunteers_Number'};
  if ($Volunteers_Number eq "") {
    $Volunteers_Number = "";
  }
  $Volunteers_Hours = $in{'Volunteers_Hours'};
  if ($Volunteers_Hours eq "") {
    $Volunteers_Hours = "";
```

```
  }
  $People_Trained = $in{'People_Trained'};
  if ($People_Trained eq "") {
    $People_Trained = "";
  }
  $Staff_Trained = $in{'Staff_Trained'};
  if ($Staff_Trained eq "") {
    $Staff_Trained = "";
  }
  $Staff_HoursTrained = $in{'Staff_HoursTrained'};
  if ($Staff_HoursTrained eq "") {
    $Staff_HoursTrained = "";
  }
  $Staff_Used = $in{'Staff_Used'};
  if ($Staff_Used eq "") {
    $Staff_Used = "";
  }
  $Staff_Assist = $in{'Staff_Assist'};
  if ($Staff_Assist eq "") {
    $Staff_Assist = "";
  }
  $General_Comments = $in{'General comments'};
  if ($General_Comments eq "") {
    $General_Comments = "";
  }
  if ($allClear) {
    &addToDB;
  }

sub addToDB {

  dbmopen(hash,QREP,0777);
  $string = "$LibJurisdiction:$Branch";
  $value = "$Name:$Email:$Report_Period:";
  $value .= "$Hours_Offered:$Hours_Access:$Hours_Connect:";
  $value .= "$Hours_Down:$People_Using:$Volunteers_Number:$Volunteers_Hours";
  $value .= ":$People_Trained:$Staff_Trained:";
  $value .= "$Staff_HoursTrained:$Staff_Used:$Staff_Assist:";
  $value .= "$General_Comments";
  $hash{$string} = "$value";

##  while (($key,$val) = each %hash) {
##    print "$key -- $val<br>";
##  }
  print "<b>Thank You</b>";
  dbmclose(%hash);

}

sub ReadParse {

  local ($i, $loc, $key, $val);
  for ($i = 0;$i < $ENV{'CONTENT_LENGTH'};$i++) {
     $in .=getc;
  }
```

```
    @in = split(/&/,$in);
    foreach $i (0 .. $#in) {
      $in[$i] =~ s/\+/ /g;
      $in[$i] =~ s/%(..)/pack("c",hex($1))/ge;
      $loc = index($in[$i],"=");
      $key = substr($in[$i],0,$loc);
      $val = substr($in[$i],$loc+1);
      $in{$key} .= '\0' if (defined($in{$key}));
      $in{$key} .= $val;
    }

    return 1;
}
```

Appendix B – convert.cgi – Used to take information from the UNIX database, and convert it into a text file.

```
#!/usr/bin/perl

  print "Please Enter the name of the file to create: ";
  $fileName = <STDIN>;
  chop($fileName);
  print "\nThanks...\n";
  $count = 0;
  dbmopen(hash,QREP,0777);
  while (($key,$val) = each %hash) {
    $val =~ s/\n/ /g;
    $val =~ s/\r/ /g;
    $list[$count] = "$key:$val";
    $count++;
  }
  #@newlist = @list;
  @newlist = sort @list;
##   while (($key,$val) = each %hash) {
##     $val =~ s/\\n/ /g;
##     $output{$key} = $val;
##   }
  dbmclose(%hash);

  open(FILE,">$fileName") || die "Bad File Operation\n";
  foreach $key (@newlist) {
    @parts = split(':',$key);
    print FILE "\nRECORDBREAK=RECORDBREAK\n";
    print FILE "LibJurisdiction=$parts[0]\n";
    print FILE "Branch=$parts[1]\n";
    print FILE "Name=$parts[2]\nEmail=$parts[3]\n";
    print FILE "Report_Period=$parts[4]\nHours_Offered=$parts[5]\n";
    print FILE "Hours_Access=$parts[6]\n";
    print FILE "Hours_Connect=$parts[7]\nHours_Down=$parts[8]\n";
    print FILE "People_Using=$parts[9]\nVolunteers_Number=$parts[10]\n";
    print FILE "Volunteers_Hours=$parts[11]\nPeople_Trained=";
    print FILE "$parts[12]\nStaff_Trained=$parts[13]\n";
    print FILE "Staff_HoursTrained=$parts[14]\n";
    print FILE "Staff_Used=$parts[15]\nStaff_Assist=$parts[16]\n";
    print FILE "General comments=$parts[17]";
  }
  print FILE "\nRECORDBREAK=RECORDBREAK";
  close(FILE);
```

Appendix C - process2.cgi – Used to convert information from the quarterly survey text file into a pipe (|) delimited text file, which can then be imported into a statistical analysis program.

```
#!/usr/bin/perl

  print "\n** Processing Report ** \n\n";

  $fields{'LibJurisdiction'} = "empty";
  $fields{'Branch'} = "empty";
  $fields{'Name'} = "empty";
  $fields{'Email'} = "empty";
  $fields{'Report_Period'} = "empty";
  $fields{'Hours_Offered'} = "empty"; ## Hours_Open
  $fields{'Hours_Open'} = "empty";
  $fields{'Hours_Access'} = "empty";
  $fields{'Hours_Connect'} = "empty";
  $fields{'Hours_Down'} = "empty";
  $fields{'People_Using'} = "empty";
  $fields{'Volunteers_Number'} = "empty";
  $fields{'Volunteers_Hours'} = "empty";
  $fields{'People_Trained'} = "empty";
  $fields{'Staff_Trained'} = "empty";
  $fields{'Staff_HoursTrained'} = "empty";
  $fields{'Staff_Used'} = "empty";
  $fields{'Staff_Assist'} = "empty";
  $fields{'General comments'} = "empty";

  @files = `ls -d reports*`;
  $i = 1;
  print "Files to process:\n\t";
  foreach $TEMP (@files) {
    chop($TEMP);
    if ($TEMP =~ /processed.*/) {}
    else {
      $file{$i} = $TEMP;
      print "[$i] $TEMP\n\t";
      $i++;
    }
  }
  print "\n----------\n";
  print "Which file would you like to process: ";
  $fileName = <STDIN>;
  chop($fileName);
  print "Thank you, I will now process '$file{$fileName}'\n";
  print "Please wait...\n";

  open(REPORT,"$file{$fileName}") || die "No File\n";
  print "Opening $file{$fileName}...\n";
  print "Reading file...\n";
  $started = 0;
  $last = "";
  $lastVal = "";
  $firstTime = 1;
  $counter = 1;
  while ($line = <REPORT>) {
    if ($line =~ /.*=.*/) {
      chop($line);
      @parts = split('=',$line);
```

```
    if (($parts[0] eq "RECORDBREAK") && ($started != 0)) {
      ##$fields{$parts[0]} = $parts[1];
      while (($key,$val) = each %fields) {
        if (($key eq "Hours_Open") && ($val ne "empty")) {
          $fields{'Hours_Offered'} = $val;
        }
        else {
          if ($val eq "empty") {
            $fields{$key} = " |";
          }
        }
      }
      $output = "$fields{'LibJurisdiction'}|$fields{'Branch'}|";
      $output .= "$fields{'Name'}|$fields{'Email'}|";
      $output .= "$fields{'Report_Period'}|$fields{'Hours_Offered'}|";
      $output .= "$fields{'Hours_Access'}|";
      $output .= "$fields{'Hours_Connect'}|$fields{'Hours_Down'}|";
      $output .= "$fields{'People_Using'}|$fields{'Volunteers_Number'}|";
      $output .= "$fields{'Volunteers_Hours'}|";
      $output .= "$fields{'People_Trained'}|$fields{'Staff_Trained'}|";
      $output .= "$fields{'Staff_HoursTrained'}|$fields{'Staff_Used'}|";
      $output .= "$fields{'Staff_Assist'}|";
      $fields{'General comments'} =~ s/\\n/ /g;
      $output .= "$fields{'General comments'}";

      while (($key,$val) = each %fields) {
        $fields{$key} = "empty";
      }
      $final[$counter] = $output;
      $counter++;
    }
    else {
      if ($parts[0] ne "RECORDBREAK") {
        $lastVal = $parts[1];
        $last = $parts[0];
        $fields{$parts[0]} = $parts[1];
        $started = 1;
      }
    }
  }
  else {
    chop($line);
    if ($line eq "") {}
    else {
      if ($line =~ /[A-Za-z]+/) {
        $fields{$last} .= " $line";
      }
      else {
      }
    }
  }
}
close(REPORT);
$final[0] = "Library Juristiction|Branch|Contact Person|Email Address|";
$final[0] .= "Reporting Period|Hours Offered/Open|Hours Accessed|";
$final[0] .= "Hours Connected|";
```

```
$final[0] .= "Hours Down|\# of people Using|\# of Volunteers|";
$final[0] .= "Volunteer Hours|People Trained|Staff Trained|";
$final[0] .= "Staff Hours Trained|Staff Used|Staff Assist|";
$final[0] .= "General Comments|";
$length = @final;
open(FILE,">$file{$fileName}.processed") || die "Couldn't Open File";
for ($i = 0;$i < $length;$i++) {
  print FILE "$final[$i]\n";
}
close(FILE);
```

Appendix D – clmailit.cgi – Used to take information from the user survey and put it into a UNIX database.

```
#!/usr/bin/perl

  print "Content-type: text/html\n\n";
  &ReadParse;
  $allClear = 1;
  $Name = $in{'Name'};
  $City = $in{'City'};
  $Library_City = $in{'Library_City'};
  if ($Library_City eq "") {
    print "<br><b>You did not enter a Library City</b>";
    $allClear = 0;
  }
  $County = $in{'Library_County'};
  if ($County eq "") {
    print "<br><b>You did not enter a Library County</b>";
    $allClear = 0;
  }
  $Branch = $in{'Library_Branch'};
  if ($Branch eq "") {
    print "<br><b>You did not enter a Library Branch</b>";
    $allClear = 0;
  }
  $How_Find = $in{'How_Find'};
  $How_Often_Use = $in{'How_Often_Use'};

  ## Checkboxes
  $checks{'School'} = $in{'School'};
  $checks{'Grade_Level'} = $in{'Grade_Level'};
  $checks{'Health'} = $in{'Health'};
  $checks{'Research'} = $in{'Research'};
  $checks{'research_subject'} = $in{'research_subject'};
  $checks{'Specific_subject'} = $in{'Specific_subject'};
  $checks{'Government'} = $in{'Government'};
  $checks{'Personal'} = $in{'Personal'};
  $checks{'Jobs'} = $in{'Jobs'};
  $checks{'Exploring'} = $in{'Exploring'};
  $checks{'Other_use'} = $in{'Other_use'};
  $checks{'Other'} = $in{'other'};
  ## End Checkboxes

  while (($key,$val) = each %checks) {
    if ($key eq "research_subject" || $key eq "Grade_Level") {

    }
    else {
      if ($val ne "") {
        $checks{$key} = "Yes";
      }
      else {
        $checks{$key} = "";
      }
    }
  }

  $How_Often_Find = $in{'How_Often_Find'};
```

```
$Internet_access = $in{'Internet_access'};
$How_easy = $in{'How_easy'};
$Computer_level = $in{'Computer_level'};

## Second Checkboxes
$checks2{'Higher speed'} = $in{'Higher speed'};
$checks2{'Better equipment'} = $in{'Better equipment'};
$checks2{'One-on-one Instruction'} = $in{'One-on-one Instruction'};
$checks2{'Classes'} = $in{'Classes'};
$checks2{'Manuals, tip sheets'} = $in{'Manuals, tip sheets'};
$checks2{'More functions'} = $in{'More functions'};
$checks2{'Different policies'} = $in{'Different policies'};
## End Second Checkboxes

while (($key,$val) = each %checks2) {
  if ($val ne "") {
    $checks2{$key} = "Yes";
  }
  else {
    $checks2{$key} = "";
  }
}

$Further_Comments = $in{'Further comments'};
if ($allClear) {
  &addToDB;
}

sub addToDB {

  dbmopen(hash,IPEVAL,0777);
  $string = "$Library_City:$County:$Branch";
  $value = "$Name:$City:";
  $value .= "$How_Find:$How_Often_Use:";
  $value .= "$How_Often_Find:$Internet_access:$How_easy:";
  $value .= "$Computer_level:$Further_Comments:";
  while (($key,$val) = each %checks) {
    if ($val eq "Yes") {
      $value .= "$key=Yes|";
    }
    else {
      if ($val ne "") {
        $value .= "$key=$val|";
      }
    }
  }
  while (($key,$val) = each %checks2) {
    if ($val eq "Yes") {
      $value .= "$key=Yes|";
    }
  }
  chop($value);
  $hash{$string} = "$value";

  print "<b>Thank You</b>";
  dbmclose(%hash);
```

```
}

sub ReadParse {

  local ($i, $loc, $key, $val);
  for ($i = 0;$i < $ENV{'CONTENT_LENGTH'};$i++) {
      $in .=getc;
  }

  @in = split(/&/,$in);
  foreach $i (0 .. $#in) {
    $in[$i] =~ s/\+/ /g;
    $in[$i] =~ s/%(..)/pack("c",hex($1))/ge;
    $loc = index($in[$i],"=");
    $key = substr($in[$i],0,$loc);
    $val = substr($in[$i],$loc+1);
    $in{$key} .= '\0' if (defined($in{$key}));
    $in{$key} .= $val;
  }

  return 1;
}
```

Appendix E – convert.cgi – Used to take information from the UNIX database, and convert it into a text file.

```
#!/usr/bin/perl

  print "Please Enter the name of the file to create: ";
  $fileName = <STDIN>;
  chop($fileName);
  print "\nThanks...\n";
  $count = 0;
  dbmopen(hash,IPEVAL,0777);
  while (($key,$val) = each %hash) {
    $val =~ s/\n/ /g;
    $val =~ s/\r/ /g;
    $list[$count] = "$key:$val";
    $count++;
  }
  @newlist = sort @list;
  dbmclose(%hash);

  open(FILE,">$fileName") || die "Bad File Operation\n";
  foreach $key (@newlist) {
    @parts = split(':',$key);
    print FILE "\nRECORDBREAK\n";
    print FILE "Library_City=$parts[0]\n";
    print FILE "Library_County=$parts[1]\n";
    print FILE "Library_Branch=$parts[2]\nName=$parts[3]\n";
    print FILE "City=$parts[4]\nHow_Find=$parts[5]\n";
    print FILE "How_Often_Use=$parts[6]\n";
    print FILE "How_Often_Find=$parts[7]\nInternet_access=$parts[8]\n";
    print FILE "How_easy=$parts[9]\nComputer_level=$parts[10]\n";
    print FILE "Further comments=$parts[11]\n";
    @checkboxes = split('\|',$parts[12]);
    foreach $TEMP (@checkboxes) {
      if ($TEMP =~ /MoreFunctions/) {
        $TEMP =~ s/MoreFunctions/More functions/;
      }
      print FILE "$TEMP\n";
    }
  }
  print FILE "\nRECORDBREAK";
  close(FILE);
```

Appendix F - process.cgi – Used to convert information from the user survey text file into a pipe (|) delimited text file, which can then be imported into a statistical analysis program.

```
#!/usr/bin/perl

  print "\n** Processing Report ** \n\n";


  $fields{'Name'} = "empty";
  $fields{'City'} = "empty";
  $fields{'Library_City'} = "empty";
  $fields{'Library_County'} = "empty";
  $fields{'Library_Branch'} = "empty";
  $fields{'How_Find'} = "empty";
  $fields{'How_Often_Use'} = "empty";

  $internet_use = "Health Research Specific_subject";
  $internet_use .= " Government Personal Jobs Exploring Other_use";
  $internet_use .= " School";
  #$fields{'Internet_Use'} = "";
## Checkboxes
  $fields{'School'} = "empty";
  $fields{'Grade_Level'} = "empty";
  $fields{'Health'} = "empty";
  $fields{'Research'} = "empty";
  $fields{'research_subject'} = "empty";
  $fields{'Specific_subject'} = "empty";
  $fields{'Government'} = "empty";
  $fields{'Personal'} = "empty";
  $fields{'Jobs'} = "empty";
  $fields{'Exploring'} = "empty";
  $fields{'Other_use'} = "empty";
## End Checkboxes

  $fields{'How_Often_Find'} = "empty";
  $fields{'Internet_access'} = "empty";
  $fields{'How_easy'} = "empty";
  $fields{'Computer_level'} = "empty";

  $make_easier = "Higher speed Better equipment One-on-one Instruction ";
  $make_easier .= "Classes Manuals, tip sheets More functions ";
  $make_easier .= "Different policies";
  #$fields{'Make_Internet_Easier'} = "";
## Checkboxes
  $fields{'Higher speed'} = "empty";
  $fields{'Better equipment'} = "empty";
  $fields{'One-on-one Instruction'} = "empty";
  $fields{'Classes'} = "empty";
  $fields{'Manuals, tip sheets'} = "empty";
  $fields{'More functions'} = "empty" ;
  $fields{'Different policies'} = "empty";
## End Checkboxes

  $fields{'Further comments'} = "empty";

  @files = `ls -d *-*`;
  $i = 1;
  print "Files to process:\n\t";
```

```
foreach $TEMP (@files) {
  chop($TEMP);
  if ($TEMP =~ /processed.*/) {}
  else {
    $file{$i} = $TEMP;
    print "[$i] $TEMP\n\t";
    $i++;
  }
}
print "\n--------------------------\n";
print "Which file would you like to process: ";
$fileName = <STDIN>;
chop($fileName);
print "Thank you, I will now process '$file{$fileName}'\n";
print "Please wait...\n";

open(REPORT,"$file{$fileName}") || die "No File\n";
print "Opening $file{$fileName}...\n";
print "Reading file...\n";
$start = 0;
$output = "";
$m = 0;
$last = "";
$counter = 1;
while ($line = <REPORT>) {
  if ($line =~ /.*=.*/) {
    @parts = split('=',$line);
    $last = $parts[0];
    if ($fields{$parts[0]} ne "") {
      chop($parts[1]);
      if ($parts[1] ne "") {
        if ($internet_use =~ /$parts[0]/) {
          $fields{$parts[0]} = "Yes";
        }
        else {
          if ($make_easier =~ /$parts[0]/) {
            $fields{$parts[0]} = "Yes";
          }
          else {
            $fields{$parts[0]} = $parts[1];
          }
        }
      }
    }
  }
  else {
    if ($line =~ /RECORDBREAK/ && $start == 0) {
      $start = 1;
    }
    else {
      if ($line =~ /RECORDBREAK/ && $start == 1) {
        while (($key,$val) = each %fields) {
          if (($internet_use =~ /$key/) && ($val eq "empty")) {
            $fields{$key} = "No";
          }
          if (($make_easier =~ /$key/) && ($val eq "empty")) {
```

```
            $fields{$key} = "No";
          }
        }
        while (($key,$val) = each %fields) {
          if ($val eq "empty") {
            $fields{$key} = "";
          }
        }

        $output = "";
        $output .= "$fields{'Name'}|$fields{'City'}|";
        $output .= "$fields{'Library_City'}|$fields{'Library_County'}|";
        $output .= "$fields{'Library_Branch'}|$fields{'How_Find'}|";
        $output .= "$fields{'How_Often_Use'}|";
        $output .= "$fields{'Health'}|$fields{'Research'}|";
        $output .= "$fields{'research_subject'}|";
        $output .= "$fields{'Specific_subject'}|$fields{'Government'}|";
        $output .= "$fields{'Personal'}|$fields{'Jobs'}|";
        $output .= "$fields{'Exploring'}|$fields{'Other_use'}|";
        $output .= "$fields{'School'}|";
        $output .= "$fields{'How_Often_Find'}|$fields{'Internet_access'}|";
        $output .= "$fields{'How_easy'}|$fields{'Computer_level'}|";
        $output .= "$fields{'Higher speed'}|$fields{'Better equipment'}|";
        $output .= "$fields{'One-on-one Instruction'}|";
        $output .= "$fields{'Classes'}|$fields{'Manuals, tip sheets'}|";
        $output .= "$fields{'More functions'}|";
        $output .= "$fields{'Different policies'}|";
        $output .= "$fields{'Further comments'}";

        while (($key,$val) = each %fields) {
          $fields{$key} = "empty";
        }
        $final[$counter] = $output;
        $counter++;
      }
    }
  }
}

close(REPORT);
$output = "";
$final[0] = "Name|City|Library City|Library County|Library Branch|";
$final[0] .= "How...Find|How Often|Health|Research|Research Subject|";
$final[0] .= "Specific Subject|Government|Personal|Jobs|";
$final[0] .= "Exploring|Other Use|School|";
$final[0] .= "How Often...Find|Internet Access|How Easy|";
$final[0] .= "Computer Level|Higher Speed|Better Equipment|";
$final[0] .= "One-on-one Instruction|Classes|Manuals, tip sheets|";
$final[0] .= "More Functions|Different Policies|Further Comments";

$length = @final;
open(FILE,">processed.$file{$fileName}") || die "Couldn't Open File";
for ($i = 0;$i < $length;$i++) {
  print FILE "$final[$i]\n";
}
close(FILE);
```

Appendix G – adminDB.cgi – Used to administer the Database files from either the quarterly or the user survey.

```
#!/usr/bin/perl

&menu;

sub menu {
  print "\n\n-------------------------------\n\n";
  print "\tDB Admin\n";
  print "\t[1] - Clear Database\n";
  print "\t[2] - Print Database\n";
  print "\t[3] - Test Populate Database\n";
  print "\t[4] - Quit\n";
  print "\n\n-------------------------------\n";
  print "Choice: ";
  $choice = <STDIN>;
  chop($choice);
}

  dbmopen(hash,IPEVAL,0777);
  if ($choice == 3) {
    for ($i = 0;$i < 100;$i++) {
      $hash{$i} = $i;
    }
  }
  if ($choice == 1) {
    foreach $key (keys %hash) {
      delete $hash{$key};
    }
  }
  if ($choice == 2) {
    while (($key,$val) = each %hash) {
      print "$key,$val\n";
    }
  }
  if ($choice == 4) {
    print "\nGoodbye\n";
  }
  dbmclose(%hash);
```

Appendix H – Changes to the Quarterly Statistics Database

Changes to Report_Period

A number of entries in the InFoPeople project team database (more than likely due to data entry errors on the part of site contacts) were erroneous. In particular, the following changes were made to the Report_Period cell based on the Input_File data:

- Contra Costa County Library, Pittsburg Branch. Changed Report_Period and Period data to match the julsep97.sur Input_File cell.
- San Diego County Library, Adult Literacy Services Branch. Changed Report_Period and Period data to match the janmar98.sur Input_File cell.
- Sacramento Public Libray, Arcade Community Library. Changed Report_Period and Period data to match the janmar98.sur Input_File cell.
- Auburn-Placer County Library, Foresthill Branch. Changed Report_Period and Period data to match the janmar98.sur Input_File cell.

Insertion of Report_Period and Period Data

A small number of libraries did not have any Report_Period or Period cell data. By using the Input_File data, it was possible to furnish that data:

- Los Angeles Public Library, Studio City Branch.
- Palo Alto City Library, Main Library.
- San Diego County Library, Lincoln Acres Branch.
- San Jose Public Library, Biblioteca Latinoamericana.

Together, these form the changes to the data set used by the study team to analyze the quarterly report data.

Appendix I – Library Liaison Survey

Charles R. McClure John Carlo Bertot

SURVEY OF KEY FACTORS AFFECTING THE INFOPEOPLE PROJECT

Introduction: The purpose of this survey is to obtain initial background information about you, to provide you with an opportunity to assess selected key issues related to your involvement in the InfoPeople project, and for you to offer suggestions related to the project. Data from this survey will help the consultants identify key issues and topics that will guide the development of the study. Please return this survey in the attached self-addressed, stamped envelope. **THANKS** for your help!

Part I: Background Information

1. Name of your library jurisdiction: _____

2. Name of your branch/site: _____

3. Current position (mark ● the ONE category that BEST describes your PRIMARY classification)

   ○ Librarian staff ○ Non-librarian staff ○ Other: _____

4. If you marked ● librarian staff or non-librarian staff, mark ● the ONE category that BEST describes your PRIMARY responsibilities:

   ○ Branch/site supervisor
   ○ Reference/Adult services
   ○ Children/Young Adult services
   ○ Systems/Electronic resources/Internet services
   ○ Other (please describe): _____

5. Years in current position: _____ 6. Years at this jurisdiction: _____

7. Years at this branch/site: _____

8. Age: _____ 9. Highest level of education (mark ● only one):

   ○ Have not completed high school
   ○ Some college
   ○ College (completed BA or BS)
   ○ Graduate school (e.g., completed MA, MS, MLS, Ph.D.)
   ○ High school or equivalent
   ○ Comm.college (completed AAS)
   ○ Professional degree (e.g., JD, MD)

10. *Total* number of *public access Internet workstations* at your branch/site (mark ● only one):

    ○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7 ○ 8 ○ 9 ○ 10 ○ 10+

11. Number of public access Internet workstations at your branch/site *supplied by the InfoPeople project* (mark ● only one):

    ○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7 ○ 8 ○ 9 ○ 10 ○ 10+

12. Highest Internet connectivity speed available to the public access workstations in my library is (mark ● only one):

○ 14.4kbps-33.6kpbs dial-up ○ 56kbps ○ ISDN ○ T1 or faster ○ Don't know

13. Do you have a community partner? ○ No ○ Yes; if yes, who? _____

[OVER]

Part II: Assessment of Key Issues. Mark ● the number that indicates the degree you agree or disagree with each of the statements below. **BE HONEST!**

A. ABOUT ME

	Strongly Agree 1	2	3	4	Strongly Disagree 5
14. I would assess myself as being *very knowledgeable* about the Internet	○	○	○	○	○
15. I would assess my *skills* in terms of *using* the Internet as very good	○	○	○	○	○
16. Training in information technology is so important that I will have to spend some of my own time and money to obtain such training	○	○	○	○	○
17. I have had to commit too much time and energy to participating in the InfoPeople project	○	○	○	○	○

B. ABOUT MY BRANCH/SITE

18. My branch/site relies on a current and well-developed strategic plan for deploying and using information technologies	○	○	○	○	○
19. There are adequate public access Internet workstations at my branch/site	○	○	○	○	○
20. When I need help to have someone fix the computer or other information technologies, they are readily available and come promptly	○	○	○	○	○
21. Library patrons receive excellent training for their use of public access Internet workstations	○	○	○	○	○
22. Our branch/site conducts regular ongoing assessments of the quality and impact of technology-based services on library *users*	○	○	○	○	○
23. My branch/site's policy(ies) related to public access and use of information technologies is very well developed	○	○	○	○	○
24. Overall, the skills of the staff at my branch/site related to the Internet are excellent	○	○	○	○	○
25. Users seem to be genuinely pleased with the access to the Internet at my branch/site	○	○	○	○	○
26. My branch/site does an excellent jot of leveraging its access to and use of the Internet through collaborations with our community partner	○	○	○	○	○
27. Providing high-quality public access to the Internet is an important goal for our branch/site	○	○	○	○	○

C. ABOUT THE INFOPEOPLE PROJECT

28. InfoPeople training programs for knowing how to use the Internet are excellent	○	○	○	○	○
29. The goals of the InfoPeople project are very clear to me	○	○	○	○	○
30. I regularly use the InfoPeople's Web site to obtain various project information	○	○	○	○	○
31. Overall, our community partner has been very involved in the InfoPeople project	○	○	○	○	○
32. The California state library should develop more programs like the InfoPeople project	○	○	○	○	○
33. Participation in the InfoPeople project has brought our library improved	○	○	○	○	○

visibility					
34. Participation in the InfoPeople project has brought us computing and telecommunications equipment that we would otherwise not have obtained	○	○	○	○	○
35. Participation in the InfoPeople project has improved the overall quality of our public access Internet services significantly	○	○	○	○	○
36. Participation in the InfoPeople project has improved the overall staff skills in Internet use significantly	○	○	○	○	○
37. Participation in the InfoPeople project has *not* been worth the effort	○	○	○	○	○

[OVER]

Part III: Suggestions and Recommendations (please print clearly!)

38. What is the single-most important *benefit* from participating in the InfoPeople project to *you*?

_____

_____

39. What is the single-most important *benefit* from participating in the InfoPeople project to your *branch/site*?

_____

_____

40. What is the single-most important *benefit* from participating in the InfoPeople project to your *community*?

_____

_____

41. What is the single-most important *problem* facing the InfoPeople project's future development?

_____

_____

42. What two recommendations would you make to *improve* the InfoPeople project?

a. _____

b. _____

43. On what two (2) topics would you most like to obtain *continuing education or training* related to information technology (please be as specific as possible)

a. _____

b. _____

44. How much would you, personally, be willing to spend to go to a one-day workshop on the continuing education topics you listed in question 43 if held in your region?

Topic A: $_____
Topic B: $_____

45. Do you have any additional information, anecdotes, suggestions, or comments about the InfoPeople project that you would like to share with us?

_____

_____

THANK YOU FOR YOUR PARTICIPATION IN THIS SURVEY! Please return the completed survey in the provided stamped, self-addressed envelope

Appendix J – Community Partner Survey

Charles R. McClure John Carlo Bertot

SURVEY OF COMMUNITY PARTNERS' VIEWS OF THE INFOPEOPLE PROJECT

Introduction: The purpose of this survey is to obtain initial background information about you, to provide you with an opportunity to assess selected key issues related to your involvement in the InfoPeople project, and for you to offer suggestions related to the project. Data from this survey will help the consultants identify key issues and topics that will guide the development of the study. Please return this survey in the attached self-addressed, stamped envelope. **THANKS** for your help!

Part I: Background Information

1. Name: _____ 2. Months served as community partner: ____

6. Name of your organization: _____

7. Your position/title: _____

8. Library with which you serve as a community partner: _____

9. Activities in which you have been involved in this project as a community partner: (mark ● all that apply)

- ○ Attended required introductory workshops
- ○ Attended regional meetings
- ○ Advised/assisted in the development of a community plan
- ○ Advised/assisted in the development of policies/procedures
- ○ Provided staff training sessions
- ○ Trained volunteers/docents
- ○ Did community outreach or other publicity
- ○ Other (please describe):
- ○ Attended optional, specialized workshops
- ○ Served on advisory committees/boards
- ○ Provided technical assistance
- ○ Provided public training sessions
- ○ Recruited volunteers/docents
- ○ Managed volunteer/docent programs
- ○ Participated in fund raising efforts

_____

_____

Part II: Assessment of Key Issues. Mark ● the number that indicates the degree you agree or disagree with each of the statements below. **BE HONEST!**

	Strongly Agree 1	2	3	4	Strongly Disagree 5
7. I would assess myself as being *very knowledgeable* about the Internet	○	○	○	○	○
8. Providing high-quality public access to the Internet is an important goal for the library	○	○	○	○	○
9. The goals of the InfoPeople project are very clear to me	○	○	○	○	○
10. The role and responsibilities of being a community partner are very clear to me	○	○	○	○	○
11. Overall, our organization has been *very* involved in the InfoPeople project	○	○	○	○	○
12. Participation in the InfoPeople project has brought the library improved visibility	○	○	○	○	○

13. Participation in the InfoPeople project has *not* been worth the effort	○	○	○	○	○
14. The community partner aspect of this project is very important	○	○	○	○	○
15. I meet or communicate with the library about our role in the project on a regular basis	○	○	○	○	○
16. The library keeps me well-informed about InfoPeople project activities	○	○	○	○	○

[OVER]

Part III: Suggestions and Recommendations (please print clearly!)

17. What is the single-most important *benefit* for your organization from participating as a community partner?

_____

_____

18. What is the single-most important *benefit* from the InfoPeople project to your *community*?

_____

_____

19. What is the single-most important *problem* facing the InfoPeople project's future development?

_____

_____

20. What one recommendation would you make to improve the InfoPeople project?

_____

_____

21. Do you have any additional information, anecdotes, suggestions, or comments about the InfoPeople project that you would like to share with us?

_____

_____

THANK YOU FOR YOUR PARTICIPATION IN THIS SURVEY!
Please return the completed survey in the provided stamped, self-addressed envelope